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THE FIRST IMPERATIVE OF TUNGUSIC

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Abstract

In this paper it will be argued that the “so-called” paradigm of the First Imperative of Tungusic is secondary. The functions attributed to the First Imperative may have been originally conveyed by particles or structures which are preserved in Manchuric. However, they were grammaticalized and modeled into a paradigm only in Common Tungusic.

1. Initial considerations

Two imperatives commonly referred to as “Imperativus praesentis” and “Imperativus futuri” can be distinguished in the Tungusic languages. The terminology is clearly based on the model laid down by the Latin grammar tradition. Now it is widely accepted that these labels are inappropriate. Imperatives always have a future time reference, i.e. they describe actions which have not taken place, but shall do in the (near) future, hence the term “Present Imperative” is no longer used. This is usually replaced by the “Immediate (Future) Imperative” or “First Imperative”. On the other hand, the “Future Imperative” may be called the “Sequential Imperative”, “Second Imperative” or “Distant (Future) Imperative”.¹

While the terminology is certainly borrowed from the Classical grammar tradition, the functions are still the same. “First Imperatives” refer to orders, requests, or wishes, addressed to a second person. “Second Imperatives” mainly express future actions or general events, this time addressed to a third person. This basic description of the Latin imperatives holds true for Tungusic imperatives too.

¹ For these and other typological questions, see Xrakovskij (2001) and Aikhenvald (2010). The traditional Indo-European view is briefly presented, and contested, in Sihler (1994: 600–654).

Latin presents two different paradigms with certain formal and functional points in common supporting the logic behind the terminology “First and Second Imperative”, while the “Second Imperative” of Tungusic only shares a functional background with the “First Imperative”, their formal expressions being very different from each other. And yet, there is still something that links both “Imperatives”. The recognition of these and other influences from other areas of the Tungusic verbal system is a key element in solving the diachronic complexities of the First Imperative.

This paper seeks to account for the diachronic evolution of the so-called “First Imperative paradigm”.²

2. Tungusic imperatives

It is open to discussion whether Tungusic actually has a “First Imperative paradigm”. In his comparative grammar, Benzing (1956: 144–145 §150) presents a table which cannot be interpreted other than as a typical full person/number paradigm. The idea of a unitary paradigm may seem to some misleading, judging from the variety of personal endings.

Specialists in Mongolic linguistics prefer to recognize each function as its own: 1 person endings are optatives or volatives, 3 person endings can be better described as benefactives or prescriptives, and 2 person endings are the traditional imperative.³ In current linguistics all these functions are referred to jointly as “Imperative-Hortative”. These include the traditional second person Imperatives as well as other related non-second person structures, irrespective of whether or not grammarians call them “Imperative”, “Hortative” or “Optatives” (see i.a. Van der Auwera et al. 2004).

Table 1 presents the application of the Mongolic perspective to the Literary Ewenki “First Imperative” endings. Instead of one full person/number paradigm, we have three minor paradigms each restricted to one person. This is of course, a rather idealized view, exclusively based on semantic considerations, but as will become clear, it is much more rewarding from a diachronic viewpoint.

	Optative	Imperative	Benefactive
1	<i>-kta</i>	∅	∅
2	∅	<i>-kal</i>	∅
3	∅	∅	<i>-gin</i>

² Important conclusions about the internal classification of the Tungusic languages can be inferred from the distribution of the endings belonging to the “First Imperative” category, as Doerfer and other authors have underlined (see i.a. Doerfer 1978: 8[h], 11, 12[h]).

³ For identical considerations in Mongolic, see Janhunen (2003a: 22–23), who strongly relies on Poppe’s (1955: 252–260 §§194–204) exposition and conclusions. All these considerations are also well known in the field of Tungusic linguistics (see i.a. Avrorin 1961: 122, Sunik 1962: 335, Robbek 1992: 98–100).

		Optative	Imperative	Benefactive
1	EX	<i>-kta-wun</i>	∅	∅
	IN	<i>-gaat</i>		
2		∅	<i>-kallu</i>	∅
3		∅	∅	<i>-ktin</i>

Table 1

If we take this as the point of departure, the recognition of (intra)paradigmatic relationships turns out to be much easier. As Janhunen (2003a: 22) remarks with regards to Mongolic: “The imperatives should [...] not be understood as having formed a full personal paradigm in Proto-Mongolic, though such an interpretation seems to be possible for some Modern Mongolic languages, notably Moghol”. The very same statement also clearly applies to Tungusic, as will be shown in the following sections.

3. Diachrony of the Imperatives in the historical languages

From a cross-linguistic perspective (diachronic typology), the historical paths of imperatives frequently include interference from paradigms of other tenses and moods. For obvious (functional) reasons, the most common targets are the Optatives (Subjunctive) and Futures (Indicative), as well as more rarely conditionals.⁴ Though the First Imperative of Tungusic involves several diachronically opaque endings, none of the authors who has touched upon the topic seem interested in tracing the possible influences from other paradigms.⁵

In the next two sections I will analyze the “First Imperative paradigm” as it has been preserved in both the Manchuric and Common Tungusic languages taking into account the idea presented in 2. as well as the concept of contact-induced changes derived from the functional proximity between some tense/mood subsystems.

3.1. Manchuric

There is no distinction between the First and Second Imperative in Manchuric. However, most endings belonging to the “First Imperative paradigm” of Common Tungusic have cognates among the Manchuric imperative endings. Since the oldest records for any Tungusic language are to be found in the Manchuric branch, it is essential, firstly, to comprehend the history of the imperative in these languages and, secondly, to compare the results with the situation in Common Tungusic.

⁴ As a matter of fact, the Second Imperative in Tungusic may be described as a blend of the Future and the Necessitative endings (see Benzing 1956: 134–136 §141[a–c] for the basic tenets of this affirmation). For an overview of the typological origins of imperatives, see i.a. Bybee et al. (1994: 218–225, 273–274) or Aikhenvald (2010: 339–369).

⁵ For a very illustrative example of this issue in the domain of Turkic linguistics, see Schönig (1987, 1995).

3.1.1. Jurchen

The earliest Tungusic imperative forms can be found without any difficulty in Late Jurchen.⁶ Both regular and irregular formations have been preserved (see i.a. Kane 1989: 121), e.g. H †*taha* ‘be obedient!’ [360] (cf. A †*saikan ha’an daha* ‘submit properly to the throne!’ [871] and WM *daha*- id., son the Ø ending, see 3.1.4), A+H †*jefu* ‘eat!’ [1017, 535] and A †*nuha fulisu* ‘walk slowly!’ [855] vs. H †*fulisuwi* ‘walk!’ [817] (*-fu* and *-su* are irregular endings, cf. WM *je-* id. and *feliye-* id., respectively, see below),⁷ H †*sangoru* ‘cry!’ [460] (*-ru* ending, cf. WM *songgo-* id.), etc.

There are two examples of *-kini*, and they come from the latest Jurchen text, namely the Tyr stele, which is dated 1413: †*sa-hini* ‘let him/them know (i.e. govern)’ [8th line] and †*be-hini* ‘let him/them be!’ [10th line] (see Golovačev et al. 2011: 201).

Instances containing the suffix *-ki* are disputed. For example, Burykin (1999: 35) considers that items such as †*gurigi* or †*tihagi* (he actually reads them as *kuliki* and *tihagi*, respectively) could be interpreted as optative-futures. At the same time he admits that there is no way to confirm such an interpretation. Kiyose (1977: 76 [324]), instead, relates the last segment of both words to a sort of denominal adjective suffix historically related to the PT genitive **-ηii* corresponding to WM *-nggi* (Benzing 1956: 90–91 §105a). Judging from some of the noun clauses in which they appear, e.g. †*tihagi egur* ‘forthwith’, lit. {following in haste} [470] or †*tihagi julee* ‘before hand’, lit. {following front} [613], cf. WM *juleri* id., it seems that Kiyose may be right.

3.1.2. Written Manchu

It is commonly assumed that the bare stem is the most basic form used to express the imperative, e.g. *ala-Ø* ‘speak!’.

The use of the optative(-future) marker *-ki* is cross-linguistically common. If it is used with the 2 person, it means that the speaker treats the listener as an equal (see i.a. Haensch 1961: 58). It can be used with the 1 person in a “Voluntative” sense, e.g. (*bi*) *ala-ki* ‘let me speak’.

WM *-rao*, the interrogative form of the imperfective participle, is most likely the continuation of PT **-ra.ki oo* (Benzing 1956: 138 §143b),⁸ the velar element in the first component being still recoverable from other Common Tungusic forms, e.g.

⁶ The Chinese transcriptions of the Late Jurchen items are from Kiyose (1977) [= H] and Kane (1989) [= A]. For ease of presentation, I will not offer Early Mandarin reconstructions. The actual readings of the Jurchen items (marked †) are presented in the traditional Romanization of Written Manchu.

⁷ The origin of the segment **-wi* in the latter form is unclear. It appears with other suffixes, especially with the causative *-bu-*, e.g. H †*mitabuwi* ‘to retreat’ [414] (cf. WM *mita-* ‘to spring back (of a bow when the string is removed)’). In a rather enigmatic passage, Ligeti (1961: 19) comments that “[...] n’ pas survécu dans le mandchou, mais qui s’explique très bien par le nanai”. Unfortunately, none of the forms which Ligeti quotes as potential lexical cognates of Jurchen corresponds to Nanai.

⁸ There are some lexical pairs like *maila.ru* ~ *maila.reo* ‘won’t you get infected please!’ (Hauer 1952–1955: 332b) that reflect two outcomes of PT **-ra.ki oo*. The difference between them may have had social connotations (the inclusion or exclusion of the final ‘please’ in the English translation?), but we cannot recover them today.

the Ulcha imperative 2_{PL} *-(ru)k.su*. WM *-rao* is a very formal expression employed when addressing a person who has a higher status than the speaker (see i.a. Haenisch 1961: 59).

WM *-kina* and *-cina* are derived from the OPT *-ki-* and the conditional converb *-ci-*, respectively, plus the interrogative particle *-na*. It is supposed to be a very formal expression employed when addressing a person who has a lower status than the speaker (see i.a. Haenisch 1961: 57).

To the best of my knowledge, Zakharov (2010[1879]: 180–182) was the first researcher to propose that WM *-kini* is the agglutination of two suffixes: OPT *-ki* and the interrogative particle *-ni*.⁹ The commonly accepted hypothesis agrees with Zakharov to a certain extent in that the first component is the OPT *-ki*, although the second element is *-ni*, the oblique form of the 3_{SG} personal pronoun *i* ‘he/she’, i.e. **-ki i.ni* > **-ki.ni*. This suffix expresses the intention to get someone to do something (see i.a. Haenisch 1961: 57), e.g. *gaji-ki.ni* ‘to order him (or them) to bring (something)’.

3.1.3. Sibe and Spoken Manchu

All descriptions seem to agree that the bare stem functions as the imperative.

There seems to be no historical continuation of WM *-ru* or *-rao*.

Sibe *-ki*, the “Voluntative” in Norman’s definition, is used with 1 and 2 persons to express (mild, kind) commands and wishes. As for the optative *-kini*, it is only used with third persons (Norman 1974: 171–172). Lǐ Shùlán, Zhòngqiān (1986: 84–86) adds *-kiä* and *-kin*, which seem to be variants of WM *-ki* and *-kini* (the former has an emphatic particle *=(y)a* attached, while the latter is preserved from WM most likely on prescriptive reasons). Although it is not literally stated, the description of the desiderative *-känä* by Kim et al. (2008: 40) agrees with the above in that the only example offered shows a 3 person predicate, as would be expected. More intriguing is the phonetic shape, for which I can only posit an analogy with other verbal endings or regressive assimilation starting from WM *-kina*.¹⁰

3.1.4. Discussion

The reconstruction of the endings **-ki*, **-kini* and **-ru* ~ **-rao* seems a rather simple issue. However, the question regarding the historical status of the \emptyset ending as the main formal expression for the 2 person imperative is less than clear.

⁹ Attractive as may seem, it is very unlikely that there is a connection between the ending *-kini* and imperative formations in direct speech as in (Bikin) Udihe *aanta nua-ma-ni dian-ka uli-we gaji-e gumu* (or: *gun-ki-ni*) {woman he-ACC-3_{SG}.possessor (= determinative function) say-PRF water-ACC bring-IMP.2_{SG} evidential (or: say-PAST-3_{SG})} ‘The woman told him: “Bring some water!”’ (Nikolaeva, Tolskaya 2001: 670–671). Leaving aside semantics and diachronic typology, deriving PT **-gi(-ni)* from PT **göön(i)-* ‘to say, think’ (Cincius 1975: 171, Doerfer 2004: 350 [4403]) poses too many problems (note that the formal similarity of the past tense in Udihe *gun-ki-ni* with Written Manchu *-kini* is fortuitous).

¹⁰ I wonder whether examples like *jixa sind bo* {money you-DAT give-IMP} ‘I give you money’, described by the authors as non-imperative (“[...] our consultant used an imperative form even in a sentence other than an imperative one”, Kim et al. 2009: 40) should be regarded as an example of the semantic domain ‘general rules’ (see also Gorelova 2002: 298[e] “actual events, states, etc.”).

Irregular imperative forms such as WM *jio* ~ *ju(u)* ‘come!’ < **ji-ru*¹¹ (cf. Late Jurchen A †*diu* [758]) or *jefu* ‘eat!’ < **jefV-ru* (cf. Literary Ewenki *jep-* id.) as well as the endings *-su* or *-nu* (resegmentations in analogy to **bi.si-ru* > **bi.siØu* > **bi.s-u* ⇒ *bi-su* ‘be!’), later extended to such verbs as *o-* ‘to become’ ⇒ **o-su* > *oso*, cf. Orok *osu*, or **we.n-ru* > **we.n-Øu* > **we.n-u* ⇒ *we-nu* ‘melt (it)!’) have been convincingly explained by other authors who basically consider that the use of the bare stem (the Ø ending) is an innovation (see i.a. Ikegami 1957 and Pevnov 2012: 61–64, the latter discusses other contexts wherein seemingly bare stem formations are used in Jurchen). They seem to be the most solid trace in Manchuric of the Proto-Tungusic verbal class. They are also the reason why Kawachi and Kiyose (2002: 94, see 95–96 for a list of the most common irregular imperatives in WM) speak of two verbal stems, i.e. primary (一次語幹 *ichi-ji gokan*) and secondary (二次語幹 *ni-ji gokan*), the latter identified with imperative forms.

Sunik (1962: 336–337) argues that Manchuric lost the corresponding endings, e.g. *ala* ‘speak!’ < **ala-Øu* < **ala-ru*, which parallels the very same evolution that took place in Ulcha, Orok, Kilen or Nanay (see below 3.2.1). Sunik’s boldness notwithstanding, since Manchuric languages seem to have reinterpreted PT vowel length on their own terms and descriptions do not attach vowel length to the imperative form (see i.a. Di Cosmo 1987, Baeg-in 1989), there is no opportunity to observe whether the imperative left a trace on the last vowel, i.e. *ala* and *bisu* would have to be phonetically interpreted as [alā] and [bisū], respectively, as in Nanay (see also Menges 1966: 123). For this reason, Sunik’s remark, though legitimate and reasonable, cannot be proven.¹² Additionally, Sibe, the only surviving Manchuric language, does actually employ the Ø ending as the most productive mean to express the imperative, e.g. with Chinese loanwords.

3.1.5. Summary

From the above it is not difficult to reconstruct the following Proto-Manchuric system:

Desiderative (Voluntative)	1	*-ki
Imperative	2	Ø
		-rao [~-ru] *-ki
Benefactive (Optative)	3	*-ki.ni

Table 2

¹¹ See Futaky (2001: 78–79) for the retention of this word in the Hungarian expression *gyere!* ‘come!’. I would like to express my gratitude to Prof. M. Stachowski for having brought my attention to this reference.

¹² If Sunik’s proposal is confirmed, then Tungusic, rather than Manchuric, is unique from an areal viewpoint, for the rest of the Core Altaic languages use the bare stem as the most basic expression of the imperative. See Janhunen (2003: 22) for Mongolic or Tenišev (1988: 340) for Turkic. Some authors, however, have already noted that the use of the bare stem to express the imperative is cross-linguistically not as popular as it may seem (Bybee et al. 1994: 210).

It is self-evident that something of a “paradigm” can be crystallized if the ending *-ki* replaces \emptyset as the imperative marker of the 2 person. This has not been completed in any Manchuric language. Additionally, *-ki* and *-kini* have clear-cut functions. Therefore, we can hardly talk about an “Imperative paradigm” in (Proto-)Manchuric.

All the endings in Table 2 have cognates in Common Tungusic. Whether this is the scenario we should reconstruct for Proto-Tungusic, it depends on the strength of the arguments to explain whether Common Tungusic innovated – if we can determine how the various Common Tungusic systems arose – or, rather, preserved the original system, which therefore was lost in Manchuric.

3.2. Common Tungusic

The main difference between Manchuric and Common Tungusic is that the latter has apparently developed a true paradigm involving the original OPT **-gi-*.¹³ This seems most obvious among the Northern Tungusic languages. See Table 3 for a comparative analysis. Note that I list only those languages which may offer some valuable information on the diachrony of the First Imperative. The division Northern vs. Southern Tungusic has been adopted to make the presentation of the data easier. The suffixes listed correspond to the variants attached to the *verba vocalia* stems. Details regarding vowel harmony and the use of each suffix can be found in the corresponding sources.

There is solid initial research on the etymology of some of these endings by Benzing (1956: 144–145 §150) and Sunik (1962: 335–341). I will summarize Benzing’s results in below (Sunik’s proposals deserve individual treatment):

- a) 3SG & 3PL endings contain OPT **-gi-* + (the oblique of) the corresponding personal pronouns. The *gi-* element corresponds to WM *-ki(ni)*;
- b) Nanay and Ulcha incorporated the 1PL possessive suffix *-pu*;
- c) Northern Tungusic **-gaari* < **-gi.wari*, where **-wari* obviously corresponds to the reflexive-possessive suffix;
- d) Ewenki 1PL *-gaat* incorporates the 1PL.IN possessive suffix *-t*;
- e) Ewen 2PL *-gaalra* incorporates the 2PL possessive suffix *-su*, i.e. **-gaa.li-su*;
- f) Common Tungusic 2SG **-kal* & 2PL **-kal.su* > Nanay *-kalu*, Pan-Ewenki *-kallu*;
- g) Ewen *-kil* may be related to the negative imperative paradigm;
- h) Ewen *-li* may be connected to the conditional converb. Thus, Ewen *bak-lii* and *baka-lra* would parallel Udihe SG *b’a-li* and PL *b’a-lehæ*.

¹³ The reconstruction of **-gi-* instead of ***-ki-* is a simple matter. In the Common Tungusic languages the unmarked variant of this suffix, i.e. those appearing after vowel verbal stems, is the one with the voiced velar stop, e.g. Literary Ewenki */-gin/*. Each language has a series of allomorphs, the most common containing a nasal and a voiceless (stop), e.g. */-gin/* ⇒ *[-ŋin]*, after *n*-verb stems, and *[-kin]*, after voiceless consonant verb stems. These variants can be more or less safely traced back to Proto-Common Tungusic, and maybe even to Proto-Tungusic too. In the Manchuric languages the (historical) voiceless “allomorph” was generalized over the rest. Therefore, **g* ⇒ **k* > */h/*, as in the Late Jurchen (Tyr stele) ablative †*-dUhi* < PT **-dUki* (Golovačev et al. 2011: 197). Other options could be analyzed, of course, but this seems to be the simplest and most economic.

Northern Tungusic

	Literary Ewenki	Sym Ewenki	Sakhalin Ewenki	Khamnigan Ewenki	Pan-Negidal	Khailar Solon	Literary Ewen	Western Ewen	Okhotsk Ewen	Arman
1	-kta	-kta	-kta	-gid	-kta	-gati ~ -kti	-da-ku	-da-kun	-dak(u)	-
2	-kal	-ka(l)	-kal	-kal	-xal	-xa	-li(k) [~ -ki]	-li	-li	-kat-i
3	-gin	-gin	-gin	-gin	-gin	-gini	-da-n	-da-n	-ga-n	-
EX	-kta-wun	-kta-wun	-kpun	-gaar	-gay ~ -gan	-gati-mun	-da-kun [~ -galra]	-gal ~ -galda	-da-kun	-
IN	-gaat	-gaa(t)	-gaar ~ -gaat	-gaar	-gaar ~ -gasun	-gaari	-da-t [~ -gar]	-lilda	-gar	-
2	-kallu	-kald'u	-kallu	-kaldui	-xan ~ -xasun	-xaldu	-lre ~ -lire(k)	-lilda	-lla	-kat-ur
3	-ktiin	-ktiin	-ktiin	-gitiin	-gitiin	= SG	-da-tun	-da.n-nan	-ga-tan	-

Southern Tungusic

	Udihe	Oroch	Orok	Kili	Ulcha	Literary Nanay	Bolon Nanay	Kilen	Kure Nanay
1	-	-	-	-	-jita	-gita	-gita	-gita	-yita
2	-ya(-ja)	-ga	-w ~ -(r)u	-ru	-w ~ -(r)u	-ru	-ru	-ru ~ -u	-ka
3	-	-	-ŋata	-	-jini	-gini	-gini	-gini	-gini
EX IN	-	-	-	-	-jipu	-gitu	-gipu -gori	-gf(u)ta	-tay
2	-ya-hu(-ja)	-ga-su	-(r)u-su	-wsu	-(ru)ksu	-su	-(r)usu ~ -gisu	-su	-kalu
3	-	-	-ŋattal	-	-jiti	-gici	-gici ~ -gini	-gici	-gita

Table 3. A comparison of the First Imperative endings

Sources: Literary Ewenki (Lebedeva et al. 1979: 144–146), Sym Ewenki (Vasilevič 1948: 74–75), Sakhalin Ewenki (Vasilevič 1948: 309, Bula-tova 1999: 28), Khamnigan Ewenki (Janhunen 1991: 84–86), Negidal (Myl'nikova, Cincius 1931: 179, 182, Cincius 1982: 35), Khaillar Solon (Poppe 1931: 123–125, Hú Zēngyì, Cháokè 1986: 71–74), Literary Ewen (Novikova 1980: 74–79, cf. also Benzing 1955: 107–108 §253), Western Ewen (Halén 1978: 21 §§43–44), Okhotsk Ewen (Lebedev 1982: 94–97),

Arman (Rišes 1955: 138); Pan-Udihe (Literary Udihe: Kormušin 1998: 96, Bikin Udihe: Nikolaeva, Tolskaya 2001: 221–222), Oroch (Avrorin, Boldyrev 2001: 317–320), Orok (Petrova 1967: 107–111, Kazama 2008: 110), Kili (Sunik 1958: 24), Ulcha (Petrova 1936: 57, Sunik 1985: 45, Kazama 2008: 110), Literary Nanay (Avrorin 1961: 122–130), Bolon Nanay (Ulitin 1933: 133), Kilen (Sem 1976: 70–71), Kure Nanay (Sunik 1948: 547).

There can be little doubt that (a–f) are correct. As for (g–h), see the next section. Benzing admitted that the origin of the 1SG element **-ta* “ist unerklärt”. He does not elaborate further on the origin of 2SG & 2PL endings either. Thus, since the origin of the 3 person endings is self-evident, it seems that we must focus on the origins of 1 and 2 person endings.

3.2.1. Common Tungusic 1SG **-gita*

This ending can be reconstructed to Common Tungusic, since it is attested in both Northern (Ewenki, Negidal, Solon) and Southern Tungusic (Ulcha, Nanay). The most extensive etymological treatment of this ending I am aware of was undertaken by Avrorin (1961: 127–128), who stated, as Benzing did before him, that its origin is “неизвестно”.

This segment is not present anywhere else, and there are no potential parallel structures to account for it. Therefore, any proposal regarding the final origin of this ending would be complete speculation as it would not be based on actual evidence. As initially appears very similar, the Second Imperative formant *-da-*, actually the supine, could be brought into discussion. However, this is unlikely to be the case. Had it been the supine, forms like the 1SG ending **-gi-ta* would have had to become ***-gi-da*.¹⁴ The enclitic nature of this element is confirmed by Kilen 1PL *-gif(u)ta*. Assuming that the Kilen ending goes back to Proto-Common Tungusic **-gi-pu=ta*, the Sakhalin Ewenki or Ulcha endings can be easily explained (they did not take the enclitic element).¹⁵ Note that Sakhalin Ewenki *-kpin* has a syncope, maybe by analogy with 1SG *-kta* and 3PL *-kpin*. As for Literary Nanay *-gito* (Kazama 2008: 110) ~ *-gitu* (Avrorin 1961: 127), both go back to **-gita-pu*, for which we have to assume that 1PL was remodeled after 1SG. The required phonetic changes thenceforth, i.e. **-gitawu* > **-gitaŋu* > *-gitu*, are similar to those found in class I stems after adding the 2SG ending, e.g. **jobo-ru* > **joboŋu* > *joboo* ‘work!’, etc. (Avrorin 1961: 123–124).¹⁶

Coming back to the final origin of **-ta* in the 1SG ending, there may be a (tenuous) link between this element and the desiderative particle =*tani(i)*, whose presence is specially relevant in Literary Nanay (also in Ulcha), where it is a compulsory element

¹⁴ This is actually the form we can more or less see in Khamnigan Ewenki 1SG *-gid* (*pace* Jahunen 1991: 85, who believes it is a type of Mongolian plural). The reason why *a* in the segment *-ta* is lost remains unclear to me. The possibility of analogical pressure from the future endings, i.e. Future 1SG *-wŋ* : 2SG *-sŋ* : 3SG *-nŋ* vs. IMP 1SG **-ta* : 2SG *-lŋ* : 3SG *-nŋ* > 1SG *-dŋ* : *-lŋ* : *-nŋ*, seems far-fetched, and it does not explain why **-t-* > *-d* (perhaps **-gita* > **-gida* > *-gid* as result of Mongolic influence?).

¹⁵ Bolon Nanay 1PL.EX *-gipu* is worth noting. Generally speaking, Bolon Nanay shows a very strong influence from Northern Tungusic (note the creation of 1PL.IN *-gori*, modeled after the PL continuative converb *-mori* according to Ulitin 1933: 142–143, as well as 2PL *-gi-su* = Ororch *-ga-su*), although the presence of 3PL *-gini* along *-gici* reminds of the Manchu(ric) and Solon 3SG = 3PL pattern.

¹⁶ Much more intriguing is Gorin Nanay 1PL *-gisu* (Putinceva 1954), where the segment *-su* cannot be interpreted under any circumstance as the 2PL personal pronoun, and the sound change **t* > *s* is unheard of in Gorin Nanay. Thus, for the time being I cannot do anything other than agree with Avrorin (1961: 127–128) about the uncertain origins of this suffix.

in the Desiderative conjugation (Avrorin 1961: 118–122, 267–268). The origin of the last segment, i.e. **-ni*, could be the same as PM **-ki.ni*, namely, the oblique of the 3SG personal pronoun. Since **-gi=ta* does not function as a desiderative, but rather as a volutative, the presence of the 3 personal pronoun seems rather unnecessary.

It is noteworthy that there were numerous cases of imperatives followed by an emphatic (hortative) particle. We have seen already the example of Udihe =*ja*, Sibe =*a*, or Ewen =*k* (all of them, however, attached to the 2 person endings).

Excursus on Northern Tungusic 1PL.IN **-gi.wari*

Interestingly enough, while Southern Tungusic extended **-gita* to the 1PL person, adding the personal ending **-pu(n)*,¹⁷ Northern Tungusic developed its own ending. This ending apparently consists of the optative marker plus the plural reflexive-possessive suffix **-wari* (Benzing 1956: 112 §125). The Second Imperative has special reflexive-possessive forms for both SG and PL, namely **(-daa-)wi* and **(-daa-)wari*. In Literary Nanay or Udihe it is used in the purposive conjugation (Literary Nanay *-go-*, Udihe *-laga-*, etc.), e.g. Literary Nanay *waagoy* & *waagoari* (with regular Ø < *-w-*), Udihe *waalagami* & *waalagafäy* (with 1SG *-mi* from the present-subjunctive personal endings, as one would expect, see i.a. Nikolaeva, Tolskaya 2001: 212–213). In the Second Imperative of Literary Ewenki and Negidal, this only applies to the 2 person, e.g. Literary Ewenki *waadaawi* & *waadaawär*, Negidal *waadaawii* & *waadaawär*, etc., while in Khamnigan Ewenki is restricted to the 1 and 2 persons, but curiously enough, the single personal ending for all person/number combinations is *-wi*. This is no doubt the result of the influence of Khamnigan Mongolian (see i.a. Janhunen 1991: 85). In the Second Imperative of Literary Ewen, the supine marker has been extended to the full person/number paradigm. However, the reflexive-possessive endings are only attached to the 2 person, while the 1 & 3 person take the Indicative endings.

As for the raising of the 1PL.EX ending, this is a rather simple matter.¹⁸ Taking the indicative mood again as a point of departure, the solution to the following proportion formula

$$1\text{PL.EX } -j\text{aa-wun} : 1\text{PL.IN } -j\text{aa-t} = x : 1\text{PL } -g\text{aa-t},$$

is ***-gaa-wun*. This form is afterwards remodeled according to the 1SG ending.¹⁹ Western Ewen *-galda* or Benzing's *-galra*, however, may partially preserve the original shape by attaching to **-gaa-* the plural *-lra* extracted from the 2PL ending.

¹⁷ On the basis of 1SG *-gati*, (Khailar) Solon creates the 1PL.EXCL *-gati-mun* with nasalization of the original **-pun*. Poppe did not document such a form, but later researchers such as T. Tsumagari or Chaoké did so. The *a-i* vocalism reflects a type of metathesis perhaps motivated by 1PL.IN *-gaari* (and 2SG *-ka?*). It is interesting to note that Simonov and Jačok (1995: 158–149) documented in Imin Solon the variants 1SG *-gta* and 1PL *-gara*. The former seems to be the intermediate stage between *-gita* and (Khailar Solon) *-kti* (Imin Solon has no ***-gti* because they do not have *-gaari*, thus the metathesis mentioned above never took place since there was no analogical model to base it on). Hú Zēngyì and Cháokè (1986: 72) have *-gata* and *-gari*, respectively.

¹⁸ Note that Khamnigan Ewenki may have not developed the corresponding form due to the Mongolian influence.

¹⁹ The creation of the 1PL.EX pair seems a natural step: “[...] there are no languages that have an opposition of inclusive-exclusive in pronouns or non-imperative verbs but that do not

As a final remark, I would like to note that, leaving aside its most common use to express coreferentiality, e.g. Literary Nanay 1SG *ga-go-y-wa* ‘(in order) to I buy’, 2SG *ga-go-a-si* ‘(in order) to you buy’, 3SG *ga-go-a-ni* ‘(in order) to he/she buys’ etc. vs. SG reflexive *ga-go-y* ‘(in order) to buy’, reflexive-possessive suffixes in combination with imperatives are cross-linguistically associated with the force of the command (Aikhenvald 2010: 207, 219). Many languages employ them to mark a rude, impolite order (e.g. Cantonese) or to make them sound milder (e.g. Meithei, a Sino-Tibetan language) or very formal (e.g. Malayalam, a Dravidian language). If that was the goal of the Northern Tungusic suffix complex **-gi.wari*, then the particularities of its usage cannot be recovered.

3.2.2. Northern Tungusic 2SG **-kal* & 2PL **-kal.su*

Provided we accept that 2SG & 2PL endings are based on the OPT **-gi-*, solving thus the final origin of the initial velar stop (see further details in 3.2.3.1), then we should be able to account for the origin of *-a-* and *-l*. I will propose two hypotheses.²⁰

3.2.2.1. Hypothesis (a)

According to the first hypothesis, these endings would have been modeled on the Immediate Future or Future II tense (Indicative mood). This is, cross-linguistically, a very common phenomenon. For example, in Mongolic the corresponding imperative endings may be analysed “[...] as the functionally obscured singular and plural forms of the futuritive participle in **-ku.(y)i : *-ku.n*, [...]” (Janhunen 2003a: 23). The 1SG *-iim*, 1PL *-yax* (so-called “Inclusive” or “Dual”) and 1PL *-yagin* endings of the Yakut First Imperative were already related to the futuritive participle *-yax* in the pioneering work of Böhntlingk, though currently such a link is disputed (see i.a. Schönig 1987).

It is not possible to claim that the Tungusic futuritive participle is the origin of the First Imperative 2 person endings. The formal expression of the imperative contains the phonetic sequence /ka/, whereas the futuritive participle has /ja/. From this I would not claim a direct identification, but just the influence of one on the other.

Two main changes would have modified the formal expression of the OPT **-gi-*. Firstly, the original *i*-vocalism has been replaced with *a* in Literary Ewenki, Negidal, Khailar Solon or Oroch. The “General Future” suffix expressing the different Future tenses in some of these languages is the imperfective marker **-ja-*,

distinguish clusivity in the imperative [...]. We suppose that *the inclusive-exclusive distinction cannot be absent in the imperative but present elsewhere* (authors’ emphasis)” (Dobrushina, Goussev 2005: 207). This is a different sort of question as to whether there is any relationship between reflexiveness and inclusivity (or put it another way, non-reflexiveness and exclusivity).

²⁰ Ramstedt popularized the genealogical connection of these Tungusic endings with the imperative form of the verb meaning ‘go’ in the Turkic languages, e.g. Uyghur *kāl* ‘go!’, via a common grammaticalization (see i.a. 1952: 83–84 §§49–50, Ramstedt originally also added Korean “-*keŕa*”). As far as the First Imperative of Tungusic is concerned, the Altaic hypothesis does not help to solve internal Tungusic problems, so I will not discuss this idea further, which I suspect may not be correct.

e.g. Literary Ewenki Future I *-ja.ŋaa-*, II *-jaa-* and III *-ja.l(i)-*. This change in the vocalic quality of the optative took place only in the 2 person because functionally futures are closer to imperatives than to optatives (= 1 person endings) or benefactives (= 3 person endings). It is easier to visualize this influence if we assume that there are three autonomous paradigms, as presented in Table 2. Otherwise, it is very unusual that such an influence would have only affected the 2 person, leaving the rest intact.

The second change is the inclusion of the inceptive marker **-l(i)-*.²¹ This time the source of the influence could be Future III, usually referred to as the “Immediate Future”. Thus, it is functionally very close to the First Imperative. Oroch *-ga* reflects the vocalism, but not the inceptive marker, because although the Future tense in this language has *a*-vocalism, it does not make use of the inceptive marker.

Counterevidence comes from the rest of the languages. Negidal “Future III” is expressed with the inceptive marker alone, as is also the case in the Udihe “Immediate Future” (Nikolaeva, Tol'skaya 2001: 309–310). The only future element in Khailar Solon, namely the futuritive participle *-jigaa-*, which corresponds to the Ewen futuritive participle, contains *i*. Moreover, there is no “Future III” in Ewen. The most similar construction from a formal viewpoint is the suffix complex *-ji-l-* (Novikova 1980: 30, 45), but this does not functionally correspond to the Future III (apparently *pace* Sunik 1962: 331).²² This sequence contains the Proto-Tungusic continuous marker **-t(i)-* > Ewen *-ci-* ~ *-ji-* and the inceptive already mentioned.²³

Therefore, it is self-evident that this hypothesis poses serious problems. The vowel correlation is not exact, and the inclusion of the inceptive suffix would only provide an explanation for Ewenki and Ewen.

	2SG IMP	“Para-Futures”	Second Imperative
Literary Ewenki	<i>-kal</i>	<i>-ja.l(i)-</i>	<i>-daa-</i>
Negidal	<i>-xal</i>	<i>[-l(i)-]</i>	<i>-daa-</i>
Ewen	<i>-kil</i>	<i>-ji-l(i)-</i> [<i>~ -jiŋa-</i>]	<i>-da-</i>

²¹ This should not be confused with the plural marker *-l-*, as in Literary Ewenki *ämä-jäl-lä-s* ‘you are going to come’.

²² One could (correctly) argue that this is the origin of Literary Ewenki and Negidal “General Future” marker *-ja-* with *-a-* instead of *-i-* as a result of the influence of other (participial) tense markers like the non-past **-ra* and past **-ka*. If there is a connection between the regularization of the “General Future” marker and the spread of the *a*-timbre to the First Imperative suffix, this highlights that **-gi-* could have also been a nominal (participial?) marker. That would explain, among other things, why a set of possessive suffixes was chosen to mark person instead of a set of pronoun suffixes.

²³ The “Polite Imperative” whose marker is the futurive participle *-jiŋa-* (see i.a. Cincius 1947: 209 §93, Malchukov 2001, Mal'chukov 2008: 111–137), which somehow cognates with the Ewenki Future I, is another factor to be taken into account. Note, however, that this would not account for the inceptive *-l-* in the 2SG imperative marker.

	2SG IMP	“Para-Futures”	Second Imperative
Solon	- <i>xa</i>	[- <i>jigaa</i> -]	- <i>da(a)</i> -
Oroch	- <i>ga</i>	- <i>jaa</i> -	-

Table 4

One could argue that the *a*-vocalism in the 2 person endings of the First Imperative is not the result of influence from the Future, but rather from the Second Imperative. There are good reasons to think that such an influence is possible. For example, Literary Ewen 1SG & 1PL.EX and the 3 person endings of the First Imperative are built on the supine (= purposive converb) *-daa-* (see i.a. Novikova 1980: 77, 98–100, also Benzing 1956: 135–136 §141[c]). The use of the supine in the Second Imperative of Literary Ewenki, Negidal and Solon is restricted to the 2 person. It is also worth noting that in Arman both the First and Second imperatives apparently merged (this happened in other languages such as Udihe or Oroch). But unlike those languages, the single imperative marker in Arman is 2SG *-kat-i* & 2PL *-kat-ur*. They seem to be a mixture of the original OPT *-gi-* (= First Imperative) and the supine *-da-* (= Second Imperative), including the reflexive-possessive endings as the only personal index (see further on this in the Excursus to 3.2.1).²⁴

In the end, the solution may lie somewhere in between, i.e. both the Future and the Second Imperative markers exerted some kind of influence on the First Imperative.

3.2.2.2. Hypothesis (b)

The departure for the second hypothesis is (Khailar) Solon 2SG *-xa* and Oroch *-ga*. It is possible to analyze the segment *-l-* in the 2PL ending **-kal.sun* as the common plural marker *-l-*. However, since the personal ending **-sun* already denotes plurality, *-l-* may be (a) reanalyzed as belonging to *-ka-*, or (b) lost because of redundancy as in Oroch *-gasu* or Negidal *-xasun*.²⁵ Once the element *-l-* is opaque, in languages like Literary Ewenki and Negidal, but not Solon or Oroch, the following proportion was solved:

$$1SG -kta-\emptyset : 1PL(IN) -kta-pun = x : 2PL -kal-sun$$

from which 2SG *-ka-\emptyset* > *-kal-\emptyset*. Curiously enough, Sym Ewenki, one of the most important ξ -Eastern dialects from a linguistic point of view, has 2SG *-ka* ~ *-kal*, the variation being perfectly reasonable if we assume that the result of a previous equation have not been totally implemented yet.²⁶

²⁴ The Orok endings 3SG *-nata* & *-nattal* < **-na-l-ta-l* (Kazama 2008: 110) may perhaps be explained in the same manner. The second plural marker *-l-* is added when the first becomes opaque as a result of assimilation with the contiguous dental stop.

²⁵ In Oroch there was no extension to the 2 person. However, the spreading of *-l-* to the 2SG ending took place in Negidal before it would be lost according to the description below (see further details in 3.2.3.1). Note that in this case the loss of the *l*-element is a typical example of parallel evolution (one independent of the other).

²⁶ Khamnigan Ewenki 2PL *-kaldui* incorporates a final element *-i* whose origin can be traced to Mongolian, cf. Khamnigan Mongolia 2(PL) *-gtui* (see i.a. Janhunen 2003b: 94).

This explanation would account very elegantly for the Solon, Ewenki and Negidal data:

		Stage 1		Stage 2		Stage 3
Negidal		*-gi ⇒ *-ka > *-xa		-xal		-xal
Solon	SG	*-gi ⇒ -ka > -xa		-xa		-xa
Ewenki		*-gi ⇒ *-ka		-kal		-kal
			>		>	
Negidal		*-gi-l(-su) ⇒ *-ka-l(-su)		*-xa-l-sun		-xasun
Solon	PL	*-gi-l(-su) ⇒ *-ka-l(-su)		-xa-l-du		-xaldu
Ewenki		*-gi-l(-su) ⇒ *-ka-l(-su)		-ka-l-lu		-kallu

Table 5

Ewen data also suits this model. See further details in the following Excursus.

Excursus on Ewen 2SG -kil & -li and 2PL -kilra & -lilra²⁷

I shall now come back to Benzing’s original proposal that Ewen -kil is taken from the negative paradigm. It must be noted that this ending is a rather marginal or dialectal marker, not included in normative grammars, whose authors agree that it belongs to the negative imperative (plural -kil.ra), e.g. ma-li ‘kill!’ vs. e-ji ma-kil ‘do not kill!’, plural ma-li.lre vs. e-ji-lre ma-kil-lre. Interestingly enough, only Benzing (1955: 107 §253) notes such an ending. Furthermore, he mentions only one instance: uli-kil=ää (the enclitic ää is also very uncommon). I have been unable to trace the source from which Benzing may have taken this example, so I cannot rule out a clerical error (via e.g. a sentence which is contextually misunderstood). However, since the similarity with other Northern Tungusic languages is striking, I think it would be interesting to explore the possibility that Benzing did not make a mistake.

In order to explain all the details, we should analyze in greater detail both affirmative and negative conjugations. The pattern governing the distribution of endings in the negative construction is shown in Table 6 (suru- ‘to leave’, ga- ‘to take’). The 2 person endings of Ewen disrupts the symmetry of the paradigm.

	Ewenki		Ewen	
	Affirmative	Negative	Affirmative	Negative
1	suru-ktä	ä-ktä suru-rä	ga-da.ku	ä-dä.kü ga-d
2	suru-käl	ä-käl suru-rä	ga-li(=k)	äji ga-kil
3	suru-gin	ä-gin suru-rä	ga-da.n	ä-dä.n ga-d

²⁷ Benzing linked Ewen -li and -lilra with the Udihe marker that corresponds with the conditional converb. This mistake is understandable, given the semantic closeness of the conditional and imperative moods, as well as the formal expression of the corresponding marker: Udihe -li corresponds to the SG same-subject conditional converb, whereas -lisi.u is the 1PL.EX different-subject suffix (Nikolaeva, Tolskaya 2001: 239–240, see paradigms on p. 250).

		Ewenki		Ewen	
		Affirmative	Negative	Affirmative	Negative
1	EX	<i>suru-ktāwun</i>	<i>ä-ktāwun suru-rä</i>	<i>ga-da.kun</i>	<i>ä-dä.kün ga-d</i>
	IN	<i>suru-gät</i>	<i>ä-gät suru-rä</i>	<i>ga-gar</i>	<i>ä-gär ga-d</i>
2		<i>suru-källu</i>	<i>ä-källu suru-rä</i>	<i>ga-lilra(=k)</i>	<i>äji-lrä ga-kilra</i>
3		<i>suru-ktin</i>	<i>ä-ktin suru-rä</i>	<i>ga-da.tan</i>	<i>ä-dä.tün ga-d</i>

Table 6

Sources: Ewenki (Lebedeva et al. 1979: 161), Ewen (Novikova 1980: 78).

Most specialists agree that the suffix *-ji* attached to the auxiliary verb *ä-* ‘not to be’ is not related to the homophonous imperfective(-future) suffix we have mentioned above. It is a special morpheme that appears only in the negation structure (Malchukov 2001: 176). Actually, *äji* is a well known particle among some Tungusic languages where it is used in the negation of the 2 person of the imperative, e.g. Literary Nanay *äji bu-rä* ‘(thou) do not give!’ and *äji bu-rä-su* ‘(you) do not give!’. Note that there is no plural distinction. In the negation of the 1 & 3 persons it is employed the particle *äm* after which there is the infinitive form of the main verb and the auxiliary *ta-* ‘to do’ plus First Imperative personal endings, e.g. *äm bu-rä ta-gita* ‘I shall not give!’. It follows that *äm* is historically related to WM *ume* ‘not’ via PT **ä-mi(i)*, i.e. *ä-* ‘not to be’ plus the imperfective converb **-mi(i)*. However, the origin of *äji* is unknown (see i.a. Avrorin 1961: 260). According to Benzing (1956: 145–146 §151b), the negative auxiliary verb was defective, and it was only possible to reconstruct defective forms, e.g. present **ässimbi* > **äsiwi*, past **äcäämbi* > **äciwi* (cf. Literary Nanay particle *äciä* used in past negations), future **ätäämbi* and imperative **äji*, as well as converbs such as the imperfective **ä-mi(i)* mentioned above.

The synchronic situation described for Ewen is a manifest example of archaism. Ewenki and Negidal have extended the concept of the paradigm to the negative conjugation, whereas Solon, Ewen and Udihe reflect the intermediate stage: Solon preserves 2SG *ëji*, but has extended the rest of the affirmative personal endings to the auxiliary in the negative construction, as has happened in Ewen.²⁸ These three languages have created analogical plural forms independently: Solon *ärcu*, Udihe *äjuhu* (< **äji-su*) and Ewen *äjilrä*. Southern Tungusic languages, e.g. Literary Nanay, Oroch and Ulcha, most likely preserve the original that is reconstructed to PT: a single form *äji* for all person/number combinations.

Note that even in those Tungusic languages where the particle *äji* is productively used, the main verb must appear in a nominal form, either infinitival or participial. The Ewen negative construction “PRT + affirmative imperative form” is unheard of in Tungusic, but common in other languages, e.g. Mongolic. The descriptive facts are simple: at some point in the history of Ewen, for an unknown reason, the affirmative

²⁸ Poppe (1931: 139 §77) even comments that it is very interesting that *äji* & *ärcu* have not been replaced by **äxä* & **äxälsun*, respectively, as one would expect when studying Ewenki.

imperative form is negated by placing the particle *äji* before it. However, the explanation for these facts is not easy to find.

Be that as it may, I think that there are some good reasons to assume that the 2SG negative imperative suffix *-kil* was displaced from the affirmative paradigm, and not the other way around, as Benzing originally proposed.

As for the element *-lra* in the plural endings, this is the regular outcome of the consonant cluster **-ls-* (Cincius 1949: 195–198 §55, Benzing 1956: 44 §56, 46 §58[d]), e.g. CT **xol.sa* ‘fish’, PT **pul.sa* > Ewen *olra* ‘id’, *hulra* ‘id’, etc., and, most likely, the regular vowel of most suffixes, i.e. the original sequence **-l-su* become **-l-ru* and subsequently the vowel *u* of the original possessive suffix was analogically regularized to resemble a common suffix. The variant *-lra* of the plural suffix highlights that speakers recognize that segment as a plural, hence the extension of *-li*, instead of **-lil*, to the SG.

	Affirmative		Negative	
	SG	PL	SG	PL
Stage 1	<i>*-ki</i>	<i>*-ki-l</i>	<i>*äji MV-r</i>	<i>*äji.l MV-r</i>
Stage 2	<i>*-ki(l)</i>	<i>*-ki.l-su</i>	<i>*äji MV-r</i>	<i>*äji.l MV-r</i>
Stage 3	<i>*-ki.l</i>	<i>-lilra</i> ²⁹	<i>äji MV-kil</i>	<i>*äji.l MV-kil.ra</i>
Stage 4	<i>-li</i>	<i>-(li)lra</i>	<i>äji MV-kil</i>	<i>äji.l.ra MV-kil.ra</i>

Table 7

(for Stages 1 and 2 I assume that the main verb [= MV] required a finite verbal ending, as in the rest of the Tungusic languages)

According to the data in Table 7, Ewen offers a fascinating view of two different historical layers. Stage 3, which regularly cognates with the corresponding affirmative endings in other Northern Tungusic languages, is preserved synchronically in the negative conjugation.

3.2.2.3. Discussion

Before evaluating the previous hypotheses, we must first consider a common problem: the distribution of the velar consonant in 3 /-g-/ and 1 & 2 /-k-/. I have delayed the discussion of this issue because it can be better understood after the previous two subsections.

The original voiced articulation of this element is preserved in Oroch 2SG *-ga* & 2PL *-ga-su* (this etymological connection was reported in Schmidt 1928: 18). The rest of the languages, however, have the voiceless *k*. Unlike the 1 & 2 endings, 3 person endings do not take an epenthetic vowel when they are added to the verbal stem: Literary

²⁹ Sunik (1962: 338) seems to be the first to explicitly describe that the 2SG & 2PL ending were the result of assimilation, i.e. *-li* < **-lil* < **-kil* and *-lilra* < **-kil-ra*, respectively. He, incidentally, also accepted Benzing’s hypothesis that Ewen endings are transposed from the negative paradigm.

Ewenki *baka-hta*, *baka-kal*, *baka-gin*, etc. vs. *soom-i.kto*, *soom-i.kol*, *soom-ŋin*, etc., from *baka-* ‘to get’ and *soom-* ‘to close’. One would tend to think that there must be a sort of paradigmatic link between the 1 & 2 person endings. This link may have a functional nature, for example 3 person endings require a third person to perform an action, while 1 & 2 have no such a requirement. Thus, the underlying principle might be the same as in Manchuric, where there is also the pattern “1 & 2 vs. 3” (in this case, the 1 & 2 person endings *-ki* share unmarkedness, whereas the 3 person ending *-kini* is the marked pair by taking the pronominal element *-ni*; although markedness here is not relevant, as the most important fact is that the 1 & 2 pair together contrast with the 3 person).³⁰ The link may be also the result of paradigmatic leveling. For example, Literary Ewenki Future III: 1SG *-jal-i.m*, 2SG *-jal-i.nni*, 3SG *-jal-la-n*, which has an epenthetic vowel in 1 and 2 person, and common phonotactics in the 3 person ending.

The syncope in 1SG (and 3PL!) also has a phonotactic nature, e.g. Literary Ewenki allative *V^o-tkii* vs. *C^o-tikii* or superlative *V^o-tkuu* vs. *C^o-diguu*. At some point in the history of Northern Tungusic, 1SG *V^o*-hta* was generalized over *C^o*-gita*. This model was extended to 1PL.EX too, and perhaps to 2SG & 2PL too. In that process, **-ga(l)* was interpreted as the *V^o*-variant, the logical *C^o*-variant being the new **-kal*. The motivation behind these changes is the link between the 1 & the 2 person which is both functional and paradigmatic, as mentioned above. In the final step, Negidal and Solon, on the basis of their own phonotactics, spirantized the intervocalic *-k-*, resulting the *x*-form of the 2SG suffix.

	Stage 1		Stage 2		Stage 3		Stage 4
1	*soom-gito *baka-hta		*soom-(.i)kto bakakta		*soom-i.kto bakakta		soomikto bakakta
2	*soom-gi *baka-gi	>	*soom-ga(l) *baka-ga(l)	>	*soom-(.i)kal bakakal	>	soomikal bakakal
3	*soom-gin *baka-gin		soom-ŋin baka-gin		soom-ŋin baka-gin		soomŋin bakagin

Table 8. Evolution of the SG endings in Literary Ewenki (*somo-* ‘to close’ and *baka-* ‘to get’)

We must assume that Ewen did not replace the original First Imperative endings with the endings of the Second Imperative until the voiceless feature of the velar stop in the hypothetical 1SG **-hta* had spread into the 2SG ending, giving time for the creation of the Ewen suffix **-kil*.³¹

³⁰ This also underlines the fact that in Northern Tungusic benefactives (= 3 person) and Optatives/Imperatives (1 & 2 persons) belong to different paradigmatic domains, each having their own rules and analogies. This is most obvious in Solon (3SG = 3PL) and Negidal (1SG underwent syncope, but not 3PL).

³¹ I wonder whether the extension of the same feature, from 1SG **-hta* to 1PL.IN *-gar*, might be the explanation for the “irregular” allomorph *-kar* of the latter, on which Benzing (1955: 108 §253) remarks “nach stimmlosen Konsonanten; manchmal auch in anderen, noch unklaren Fällen.”

Unfortunately, the main tenet of this hypothesis is not devoid of problems. In the Solon dialect-cluster described by Hun Zengyi and Chaoke (1986: 72), 1SG *-gata* (no trace of the variant *-kta*) shares space with 2SG *-xa*, from which we must deduce that the predecessor **-ka* appeared without the alleged model after the 1SG **-kta*. Likewise, in Khailar Solon 1SG *-gati* is generalized to 1PL *-gati-mun*, what did not preclude the advent of 2SG *-xa* & 2PL *-xaldu*. The same holds true for Khamnigan Ewenki, with 1SG *-gid* and 2SG *-kal* & 2PL *-kaldui*. Perhaps in these languages the variant **C^o-gita* generalized after the changes described above had been completed. Needless to say, one could just claim that the 2 person endings are not connected to the OPT suffix.

Regarding the final origin of **-kal*, hypothesis (b) seems much more economic and simpler than hypothesis (a). It accounts for *-l* in straight-forward, well-known phonetic terms, with no need to resort to morphological implementations. Nevertheless, the introduction of *a*-vocalism is better accounted for in hypothesis (a). Hypothesis (b), however, explains quite convincingly the distribution of the element *-l-* in the 2SG (and 2PL!) endings. And yet, there is a typological, areal motivation backing up the Future as a direct source for the modeling of **-kal*. It would not be surprising if both hypotheses are actually correct for historical events in linguistics are usually the outcome of a combination of several factors.

3.2.2.4. Summary

The influence of either the “General Future” marker *-ja-* or the Second Imperative (supine) marker *-da-* changed the original *i*-vocalism of the OPT marker **-gi-* into the new *a*-vocalism of **-ka(l)*. The voiceless velar stop in 1SG generalized over the 1 & 2 person endings. Two options merit discussion regarding the final origin of the segment *-l-*: in some languages it may correspond to the inceptive of the Immediate Future, in others it may be a redundant plural marker, extended by analogical means to the 2SG ending after resegmentation **-ka-l.su* ⇒ **-ka.l-su*.

The relative chronology of the changes described for the 2 person suffix in Northern Tungusic is as follows:

- [1] 1SG **-gi=ta* > **-kta* (all languages but Khamnigan Ewenki, to a certain extent Solon?)
- 2) 2SG **-gi* > **-ki* (all languages);
- 3) *i*-vocalism > *a*-vocalism (all languages but Ewen);
- 4) spread of *-l* (irrespective of its final origin: all languages but Solon);
- [5] Ewen replaces First Imperative endings.]

It is worth noting that Oroch 2SG *-ga* did not evolve into ***-ka* because in this language there wasn't the 1SG ending model to follow. *a*-vocalism may be a parallel evolution (the influence of futures on imperatives is, after all, universal).

3.2.3. Other systems, other endings

3.2.3.1. Getting rid of one imperative paradigm

It would seem that few languages merged the First Imperative with the Second Imperative. In some cases “merging” may not be the most accurate term. Another option is that one of the imperatives never actually existed. We have already seen

this is the case of Arman (see above 3.2.2.1) which requires the preexistence of both imperatives. Other cases are far from clear.

For example, in Udihe the optative suffix **-gi-* ~ **-ki-* disappeared via the regular sound change **-k- > Ø* (Cincius 1949: 218–229 §68, Benzing 1956: 28–29 §40). The same phonetic change occurred in Orok, where we have no trace of the optative suffix. In Ulcha *-gi-* was changed into *-ji-* (this is a systematic sound change in Ulcha, see i.a. Petrova 1936: 20–21). Orok preserves 2SG *-ru* & 2PL *-su*, whereas Udihe seemingly generalized the outcome of PT **-raki* (*oo*) via well know sound changes, namely **-k- > Ø* and **-r- > -y-* (for the latter, see Cincius 1949: 245–246 §78, Benzing 1956: 46–47 §59[a]), thus generating 2SG *-ya(=ja)* & 2PL *-ya-hu(=ja)*, with an optional emphatic element *=ja* (Nikolaeva, Tolskaya 2001: 221–222, 468–470, it may appear alone, or after the imperative, e.g. *gulini-u-je* ‘come on!’), as in Sibe. The main impression which one gets from the evidence in Udihe, Oroch and Orok is that there was no a full paradigm (similar to that in Northern Tungusic) based on the *gi*-element beyond the 2 person.

3.2.3.2. Negidal

The sound change **-r(-) > -y(-)* is also systematic in Negidal, with the results observed in 2PL *-gay* < **-gaar*. It may seem intriguing that 1PL and 2PL variants *-gan* and *-xan*, respectively, together with 2PL *-xasun*, do not show the expected *l*-plural marker that is only preserved in 2SG *-xal* most likely for analogical reasons (see above 3.2.2.2). I think that the imperative endings have transposed the final *-n* of the indicative endings, e.g. 1PL *-pun* and 2PL *-sun*. This can be described as the analogical extension of 3SG *-nin* (: 3SG imperative *-gin*) & 3PL *-tin* (: 3PL imperative *-gitin*). These extensions would not have affected 1SG & 2SG because in the Indicative the corresponding endings, namely *-w* and *-s*, respectively, have no final *-n*. Thus, the sphere of influence in the case of Negidal should be understood as a matter of paradigm vs. paradigm, i.e. Indicative vs. Imperative:

	Pre-Negidal Imperative		Negidal Imperative		Indicative
1	<i>-xta</i>		<i>-xta</i>		<i>-w</i>
2	<i>-xal</i>		<i>-xal</i>		<i>-s</i>
3	<i>-gi.n</i>		<i>-gin</i>		<i>-nin</i>
1	<i>*-ga-(pu)n</i> (: <i>-gay</i>)	>	<i>-gan</i> (: <i>-gay</i>)	←	<i>-pun</i> (: <i>-t</i>)
2	<i>*-xa.l-(su)n</i>		<i>-xa(su)n</i>		<i>-sun</i>
3	<i>-gitin</i>		<i>-gitin</i>		<i>-tin</i>

Table 9

The explanation for such a behavior may depend on distinctiveness. There is no need for personal indexes such as **-pu* and **-su* in the synchronic paradigm because they

would be redundant. But in the end, this may provoke situations in which the 2PL variant *-xasun* exists alongside *-xan* because the distinction from 1PL depends only on the initial velar stop (*g-* vs. *x-*).³²

3.2.3.3. Kure Nanay

Kure Nanay³³ has the most intriguing set of endings. We have to bear in mind that Kure Nanay (and by extension Kili too) is heavily influenced by Northern Tungusic. Some phonological features can be ascribed to Ewenki, Negidal and Solon, but its grammar belongs to Nanay (see i.a. Janhunen 1996: 61–62, 2005: 42, or Doerfer 1977: 57, 60 §2, in which two groups are introduced: “A = Manchu, Ulcha, Nanay” and “B = Udihe, Ewenki, Kili”). However, in this case, it is obvious that a massive morphological influence has been exerted by Northern Tungusic.

It is not difficult to explain 2PL *-tay* as the historical continuation of **-tar*, with the same sound change **r > y* found in Udihe and Negidal, as mentioned above.

waa-ka and *waa-kalu* apart, there seems to be little symmetry in the Kure Nanay system. The segment **-ta-* in 2PL *-tay* was perhaps extracted from the 1SG *-yta*. As for the element *-y-* in *-yta*, it cannot be dismissed as just an epenthetic vowel for it appears even with vowel-final stems, e.g. *waa-yta*. The final vowel *-a* in 3PL *-gita* < **-gitin* is unexpected too.

Kure Nanay, Khamnigan Ewenki, and to a certain extent Western Ewen are the only cases where contact-induced changes can be proposed to account for the peculiarities of their “First Imperative” systems.

3.2.3.4. Western Ewen

Interestingly enough, the Western Ewen idiolect spoken by Gavril Nikitin, which mostly corresponds to the Sakkyryr dialect, has 1PL *-gäl* ~ *-gäldä*. The distribution of such forms is well known: dialects having only the former ending belong to the Eastern group, whereas dialects with both endings belong to the Western group. Halén-Sotavaltá’s characterization of this opposition, based on Nikitin’s testimony, is “[zwei] vs. [viele]”. This, of course, does not correspond to the opposition inclusive vs. exclusive, but rather to the inclusive minimal / inclusive augmented, present in some neighboring languages, most notably Yakut. Actually, the origin of the functional category can certainly be accounted for by invoking language-contact.

³² Interestingly enough, one dialect of Lower Negidal (i.e. the Negidal language spoken in the Lower Amgun’ region) has notable variants in the negation of the 2 person, e.g. *u-xul ḡänä-ä* ‘(thou) don’t go’ and *u-xusun ḡänä-ä* ‘(you) don’t go’ (Xasanaova, Pevnov 2003: 282).

³³ It may initially appear that Sunik deals with the same linguistic material in his paper of 1948 and his monograph of 1958. However, even a cursory examination of the contents in both works would immediately reveal that this is not the case. Therefore, I have decided in the present paper to deal with these varieties separately. If in the end it turns out that “Kure Nanay” is a dialect of Kili or Nanay, this is not important. The imperative endings in Sunik (1948) are markedly different from those in Sunik (1958), and they have historical value, so it would be necessary to account for them irrespective of the exact position of “Kure Nanay”.

The inclusive minimal ending has naturally been used to create the augmented pair. The segment *-l* corresponds to the plural marker which has replaced Literary Ewen *-r*. The plural **-lra*, i.e. **-gal.lra > -galra ~ -galda*, etc., has been extracted from 2PL *-(li)lda*.

The development of 3PL *-dannan* is also interesting, maybe the result of the following formula:

$$2\text{SG } -li-\emptyset : 2\text{PL } -lilda = 3\text{SG } -dan-\emptyset : x$$

from which *-dannan* (< **-tAn*, cfr. Literary Ewen *-da-tun*) is the only reasonable solution.³⁴

3.2.3.5. Proto(-Common?) Tungusic 2PL **-su*

Cross-linguistically, only the 2SG imperative ending used to have a special marker, while the set of plural endings was frequently taken in its entirety from the Indicative paradigm (e.g. among the Indo-European languages). One could argue that Proto-Common Tungusic had two endings: 2SG **-ru* (PT < **-ra.ki oo*) and 2PL **-su*, which were directly attached to the bare stem, as happens to be the case in such historical languages as Literary Nanay. It is worth noting that the element **-su* is present in all Common Tungusic languages, unlike 2SG **-ru*, which disappears in Northern Tungusic. However, within Southern Tungusic, it also survives even when **-ru* is no longer used, as in Oroch or Udihe, where it is added to whatever suffix characterizes the imperative mood.

In Orok, the presence of the 2PL variant *-ru-su* is only noted in class II verbs, i.e. monosyllabic vowel-stem verbs. Since there is no logical reason to invoke analogical extension (why would it be found only in class II verbs?), the likeliest solution seems to be that the variant *-ru-su* is intended to add phonological weight to monosyllabic forms.³⁵

4. Conclusions

Jasanoff's (2006: 203) remarks about the diachronic study of Indo-European imperatives are very appropriate: "[...] the forms of the imperative in the daughter languages offer special challenges and rewards. Challenges, because imperatives everywhere are subject to frequently confusing "irregular" developments [...]. But there are compensating rewards. Owing to its functional isolation from other verb forms, the imperative is often the repository of significant archaisms".

³⁴ In Okhotsk Ewen, one of the Easternmost dialects, the SG endings exerted the influence on the PL endings. Thus, 2SG *-li-∅* extended to 2PL *-lla = -lla-∅* (put it another way, it loses the *da*-final segment) and the vocalism of 3SG *-ga-n* (< **-gi-n*) extends to 3PL *-ga-tan* (cfr. Khamnigan Ewenki *-gin : -gitin*). Okhotsk Ewen preserves the opposition *da*- vs. *ga*-endings, unlike Literary Ewen (*da*-endings generalized altogether) and, to a certain extent, Western Ewen.

³⁵ As for dialectal Nanay *-ru-su* (Kazama 2008: 110), I ignore the details, therefore, I cannot reach any conclusions based on solid evidence as to this is the same case as in Orok, or rather an analogical extension from the 2SG person.

One very important conclusion is that Manchuric should be regarded as the most conservative member of the Tungusic family. It is my understanding that, at least in the case of the imperatives, it is easier to assume that the Common Tungusic languages generated their own personal endings and eventually a new verbal paradigm than to accept that Manchuric lost all its endings.

	PT		PM
1	*-gi (?)		*-ki
2	[Ø?] *-gi & *-ra.ki oo		[Ø?] *-ki & *-rao [~ *-ru]
3	*-gi.ni		*-kini
		>	
1			= sg
2	= sg (?)		
3			

Table 10

As a result of the analogy with Indicative-Subjunctive paradigms, Northern Tungusic (Solon, Arman, and Ewen) but including Ulcha, Nanay and Kilen, developed the 3PL *-gi.tin ending:

$$3SG -(jaa-)n : 3PL -(jaa-)tin = 3SG -gi-n : x$$

where x = *-gi.tin. Thus, the earliest system, albeit hypothetical, which we can recover for the Common Tungusic parent language includes 3 person endings, 2 person endings with *-ru and *-su (= “Imperative”), and perhaps 1 person *-gi (identical for both numbers!).³⁶ Extending the gi-element from the 1 person to the 2 person is a natural step, once the position of the 3 person endings is secured and the original imperative endings of the 2 person, i.e. *-ru (possibly *-su), fall into disuse. Originally, the desiderative particle *=ta, possibly related to the supine marker *-da- and the desiderative particle present in the Future II of (Literary) Nanay or Ulcha,³⁷ is added to the 1SG, and later to the 1PL.EX, perhaps to distinguish the 1 person endings from those of the 2 person. Then the possessive suffixes 1PL.EX *-pu(n) and 2PL *-su(n) are attached to the corresponding persons.

We cannot talk about a “First Imperative paradigm” in Proto-Tungusic based on the arguments above. It is possible that the use of the optative marker *-gi- was optional during the PT stage, perhaps determined by social factors which we can not

³⁶ The lack of a 3PL distinctive ending in Solon, a common feature which can be observed in the indicative mood too, e.g. *jawa-ra.n* ‘he seizes / they seize’, may well be due to Manchuric or Mongolian influence. Surely, it can be regarded as a secondary phenomenon entirely belonging to the Solon sphere.

³⁷ See also the focus-restrictive element -ta in Udihe (Nikolaeva, Tolskaya 2001: 458–459), although this is never added to verbal forms.

longer recover (they could, however, resemble current uses in Manchuric). The *gi*-element was generalized into a paradigm only in Northern Tungusic,³⁸ where the real imperative Proto-Tungusic endings 2SG *-*ru* and most likely also 2PL *-*su* were not used, for reasons unknown, and, consequently, lost. Then the *gi*-element appeared to fill the gap left by the loss of those endings. The fact that Southern Tungusic languages, with the exception of Oroch, have not preserved a trace of the *gi*-element in the 2 person endings is conclusive at this respect.

The evolution of each system is determined by several patterns on which the analogies are based. These patterns are most obvious within Northern Tungusic. There are languages with such pairings as 1+3 vs. 2 (e.g. Literary Ewen), and others with 1+2 vs. 3 (e.g. Literary Ewenki, Negidal).

Surprisingly enough, Kilen preserves the system closest to the original Common Tungusic. Kilen, usually together with Kili, is generally described as a mixed language combining phonological features from Udihe with the morphology of Nanay (see above 3.2.3.3). In the case of imperatives, however, only the first part of the statement appears to be true.

Last but not least, my proposal relies heavily on different paths of influence. However, I believe that such paths are supported by very solid cross-linguistic research. The most common origin for imperatives is to be found in Optatives and (Immediate) Futures. These paths are in line with the semantic-functional pathways of intention, future and prediction (= futures), hypothesis, supposition and suggestion (= subjunctives), as well as desubordination and incomplete speech acts (= conditionals) as described by Aikhenvald (2010: 363). Parallels in Turkic and Mongolic also support some of these assumptions.

Abbreviations

ACC = accusative; CT = Common Tungusic; EX = exclusive; IMP = imperative; IN = inclusive; NT = Northern Tungusic; OPT = optative; PRF = perfective; SG = singular; ST = Southern Tungusic; PL = plural; PT = Proto-Tungusic; WM = Written Manchu.

References

- Aikhenvald A. 2010. *Imperatives and Commands*. Oxford.
 Avrorin B.A., Boldyrev B.V. 2001. *Grammatika oročkogo jazyka*. Novosibirsk.
 Avrorin B.A. 1961. *Grammatika nanajkogo jazyka*, v. 2. *Morfologija glagol'nyx i narečnyx, častej reči, meždometij, služebnyx slov i častic*. Moskva, Leningrad.

³⁸ The changes described for Northern Tungusic would, incidentally, confirm Garrett's recent discussion about the ultimate nature of the non-existence of "pure leveling": the emergence of paradigm uniformity is always the imposition of an existing (uniform) pattern on a non-uniform paradigm, irrespective of directionality or markedness, i.e. each language makes use of its own resources (see i.a. Garrett 2008).

	NT (II)	NT (I)	CT	ST (I)	ST (II)
1	*-kta [~ *-gita]	*-gi=ta	*-gi=ta	*-gi=ta	*-gita
2	*-ka(l)	*-gi	Ø [~ *-ru]	[-*-ru]	[-*-ru]
3	*-gi.n(i) ³⁹	*-gi.n(i)	*-gi.ni	*-gi.ni	*-gi.ni
EX 1	*-kta-pun [~ *-gita-pun]	*-gaar	*-gi.wari (?)	*-gi.pu=ta	*-gitu ~ *gipu
IN 2	*-gaar ~ *-gaa.t	*-gi.l(-su)	Ø [~ *-su]	[-*-su]	[-*-ru.su]
3	*-ka.l-su	*-gi.tin	*-gi.ti(n)	*-gi.ci	*-gi.ci

Table 11. Synoptic chart with the evolution of the First Imperative from Proto-Common Tungusic

³⁹ The loss of the final vowel /i/ is expected in Literary Ewenki and Negidal (Doerfer 1967).

- Baeg-in S. 1989. Vowel length in Manchu. – Stary G. (ed.), *Proceedings of the XXVIII permanent international Altaistic conference (Venice 8–14, July 1985)*. Wiesbaden: 195–216.
- Benzing J. 1955. *Lamutische Grammatik mit Bibliographie, Sprachproben und Glossar*. Wiesbaden.
- Benzing J. 1956. *Die tungusischen Sprachen. Versuch einer vergleichenden Grammatik*. Wiesbaden.
- Bulatova N.Ja. 1999. *Jazyk saxalinskix èvenkov*. Sankt-Peterburg.
- Burykin A.A. 1999. Morphological aspects of the language of the Jurchen script. – Janhunen J., Rybatzki V. (eds.) *Writing in the Altaic World*. Helsinki: 29–39.
- Bybee et al. = Bybee J., Perkins R., Pagliuca W. 1994. *The evolution of grammar. Tense, aspect, and modality in the languages of the world*. Chicago, London.
- Cincius V.I. (ed.) 1975. *Sravnitel'nyj slovar' tunguso-man'čžurskix jazykov* [vol. 1]. Leningrad.
- Cincius V.I. 1947. *Očerk grammatiki èvenskogo (lamutskogo) jazyka* [vol. 1 *Fonetika i morfologija*]. Leningrad.
- Cincius V.I. 1949. *Sravnitel'naja fonetika tunguso-man'čžurskix jazykov*. Leningrad.
- Cincius V.I. 1982. *Negidal'skij jazyk. Issledovanija i materialy*. Leningrad.
- Di Cosmo N. 1987. Alcune osservazioni sull'accento mancese. – *Aetas Manjurica* 1: 1–14.
- Dobrushina N., Goussev V. 2005. Inclusive imperative. – Filimonova E. (ed.) *Clusivity. Typology and case studies of the inclusive-exclusive distinction*. Amsterdam: 179–211.
- Doerfer G. 1967. Urtungusisch *-i, *-i, *-u, *-ü im Evenkischen. – *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 117: 103–118.
- Doerfer G. 1977. Ist Kur-Urmiisch ein nanaischer Dialekt. – Decsy G., Dimov-Bogoev Ch.D. (eds.) *Eurasia nostratica. Festschrift für K.H. Menges* [vol. 1]. Wiesbaden: 51–63.
- Doerfer G. 1978. Classification Problems of Tungus. – Weiers M. (ed.) *Tungusica. Beiträge zur nordasiatischen Kulturgeschichte*. Wiesbaden: 1–26.
- Doerfer G. 2004. *Etymologisch-ethnologisches Wörterbuch tungusischer Dialekte*. [Unter Mitwirkung von M. Knüppel]. Hildesheim, Zürich, New York.
- Garrett A. 2008. Paradigmatic uniformity and markedness. – Good J. (ed.) *Explaining linguistic universals: Historical convergence and universal grammar*. Oxford: 125–143.
- Golovačev V.C., Ivliev A.L., Pevnov A.M., Rykin P.O. 2011. *Tyrskie stely XV v.: nepevod, komentarii, issledovanie kitajskix, mongol'skogo i čžurčžen'skogo tekstov*. Sankt-Peterburg.
- Gorelova L. 2002. *Manchu Grammar*. Leiden.
- Halén H. 1978. *Westlamutische Materialien*. Helsinki.
- Haenisch E. 1961. *Mandschu-Grammatik*. Leipzig.
- Hauer E. 1952–1955. *Handwörterbuch der Mandschusprache*. Wiesbaden.
- Hú Zēngyì, Cháokè. 1986. *Èwēnkèyǔ jiǎn zhì*. Běijīng.
- Ikegami J. 1957. Über die Herkunft einiger unregelmäßiger Imperativformen der mandschurischen Verben. – *Studia Altaica. Festschrift für Nikolaus Poppe zum 60. Geburtstag am 8. August 1957*. Wiesbaden: 88–94.
- Janhunen J. 1991. *Material on Manchurian Khamnigan Evenki*. Helsinki.
- Janhunen J. 1996. *Manchuria. An Ethnic History*. Helsinki.
- Janhunen J. 2003a. Proto-Mongolic. – Janhunen J. (ed.) *The Mongolic Languages*. London, New York: 1–29.
- Janhunen J. 2003b. Khamnigan Mongol. – Janhunen J. (ed.) *The Mongolic Languages*. London, New York: 83–101.
- Janhunen J. 2005. Tungusic: an endangered language family in Northeast Asia. – *International Journal of the Sociology of Language* 173: 37–54.
- Jasanoff J. 2006. The ending of the PIE 2 sg. middle imperative. – *Die Sprache* 46.2: 203–212.

- Kane D. 1989. *The Sino-Jurchen Vocabulary of the Bureau of Interpreters*. Bloomington.
- Kawachi Y., Kiyose G.N. 2002. *Manshū-go bungo nyūmon*. Kyōto.
- Kazama S. 2008. The diachronic development of the Group III of Tungusic languages. – Kurebito T. (ed.) *Linguistic Typology of the North*. Tokyo: 103–123.
- Kim J., Ko D., Chaoke D.O., Han Y., Piao L., Boldyrev B.V. 2008. *Materials of Spoken Manchu*. Seoul.
- Kiyose G. 1977. *A Study of the Jurchen Language and Script*. Kyoto.
- Kormušin I.V. 1998. *Udyxejskij (udègejskij) jazyk*. Moskva.
- Lebedev V.D. 1982. *Oxotskij dialect èvenskogo jazyka*. Leningrad.
- Lebedeva et al. = Lebedeva E.P., Konstantinova O.A., Monaxova I.V. 1979. *Èvenkijskij jazyk. Posobie dlja pedagogičeskix učilišč*. Leningrad.
- Lǐ Shūlán, Zhòngqiān. 1986. *Xībózǔ jiǎn zhì*. Běijīng.
- Ligeti L. 1961. Les inscriptions djurtchen de Tyr. La formule *Om maṇi padme hūm*. – *Acta Orientalia Academiae Scientiarum Hungaricae* 12.1–3: 5–26.
- Malchukov A.L. 2001. Imperative Constructions in Even. – Xrakovskij V. (ed.) *Typology of Imperative Constructions*. Munich: 160–80.
- Mal'čukov A.L. 2008. *Sintaksis èvenskogo jazyka. Semantičeskie, strukturnye, kommunikativnye aspekty*. Sankt-Peterburg.
- Menges K.H. 1966. Zur Verbal-Morphologie des Nānaj (II). – *Ural-Altäische Jahrbücher* 38: 122–132.
- Myl'nikova K.M., Cincius V.I. 1931. Materialy po issledovaniju negidal'skogo jazyka. – *Tunguskij sbornik* 1: 107–218.
- Nikolaeva I., Tolskaya M. 2001. *A Grammar of Udihe*. Berlin.
- Norman J. 1974. A Sketch of Sibe Morphology. – *Central Asiatic Journal* 18: 159–74.
- Novikova K.A. 1980. *Očerki dialektov èvenskogo jazyka. Ol'skij govor. Glagol, služebnye slova, teksty, glossarij*. Leningrad.
- Petrova T.I. 1936. *Ul'čskij dialekt nanajskogo jazyka*. Moskva, Leningrad.
- Petrova T.I. 1967. *Jazyk orokov (ul'ta)*. Leningrad.
- Pevnov A.M. 2012. On Some Archaic Features of the Jurchen Language. – *Hoppō jinbun kenkyū (Gedenkschrift for Jirō Ikegami)* 5: 57–69.
- Poppe N.N. 1931. *Materialy po solonskomu jazyku*. Leningrad.
- Poppe N. 1955. *Introduction to Mongolian Comparative Studies*. Helsinki.
- Putinceva A.P. 1954. *Morfologija govora gorinkix nanaj*. Leningrad.
- Ramstedt G.J. 1952. *Einführung in die altaische Sprachwissenschaft* [vol. 2. *Formenlehre*, ed. by Pentti Aalto]. Helsinki.
- Rišes L.D. 1955. Osnovnye osobennosti armanskogo dialekta èvenkogo jazyka. – *Doklady soobščeniya Instituta Jazykoznanija AN SSSR* 7: 116–146.
- Robbek V.A. 1992. *Grammatičeskie kategorii èvenskogo glagola*. Sankt-Peterburg.
- Schmidt P. 1928. The language of the Oroches. – *Acta Universitatis Latviensis* 17: 17–62.
- Schönig C. 1987. Diachronic and areal approach to the Turkic imperative paradigm. – Van Damme M., Boeschoten B. (eds.) *Utrecht papers on Central Asia*. Utrecht: 205–222.
- Schönig C. 1995. Analogie als Sprachbildende Kraft in den Türksprachen. – Kellner-Heinkele B., Stachowski, M. (eds.) *Laut und Wortgeschichte der Türksprachen*. Wiesbaden: 123–144.
- Sem L.I. 1976. *Očerk dialektov nanajskogo jazyka. Bikinskij (ussurijskij) dialekt*. Leningrad.
- Sihler A. 1994. *New Comparative Grammar of Greek and Latin*. Oxford.
- Simonov M.D., Jačok M.T. 1995. Novye dannye po leksike i grammatike solonskogo jazyka. – *Linguistic and Oriental Studies from Poznań* 2: 143–181.
- Sunik O.P. 1948. O jazyke nanajcev r. Kúre. – *Izvestija Akademii nauk SSSR. Otdelenie literatury i jazyka* 7.6: 537–550.

- Sunik O.P. 1958. *Kur-Urmijskij dialekt. Issledovanija i materialy po nanajskomu jazyku*. Leningrad.
- Sunik O.P. 1962. *Glagol v tunguso-man'čžurskix jazykov*. Leningrad.
- Sunik O.P. 1985. *Ul'čskij jazyk. Issledovanija i materialy*. Leningrad.
- Tenišev È.R. (ed.) 1988. *Sravnitel'no-istoričeskaja grammatika tjurkskix jazykov* [vol. 2. *Morfologija*]. Moskva.
- Ulitin A. 1933. Materialy po gol'dskomu (nanajskomu) jazyku. – *Jazyk i myšlenie* 1: 119–147.
- Van der Auwera et al. = Van der Auwera J., Dobrushina N., Goussev V. 2004. A Semantic Map for Imperative-Hortatives. – Willems D., Defrancq B., T. Coleman T., Noël D. (eds.) *Contrastive Analysis in Language. Identifying Linguistic Units of Comparison*. Basingstoke: 44–66.
- Vasilevič G.M. 1948. *Očerki dialektov èvenkijskogo /tunguskogo/ jazyka*. Leningrad.
- Xasanova M.M., Pevnov A.M. 2003. *Mify i skazki negidal'cev*. Suita: ELPR.
- Xrakovskij V. (ed.) 2001. *Typology of Imperative Constructions*. Munich.
- Zaxarov I.I. 2010(1879). *Grammatika man'čžurskogo jazyka*. Folkestone.