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**Tungusic from the Perspective of Areal Linguistics:
Focusing on the Bikin Dialect of Udihe**

(地域言語学的観点から見たツングース諸語—ウデヘ語のビキン方言を中心に)

By
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Preface

Focusing on four syntactic features (third person markings on finite indicative forms, the converbal ending *-mi, conditional forms, and correlatives), this dissertation explains grammatical variations among Tungusic from the perspective of areal linguistics.

This dissertation is composed of revised and extended English versions of eight articles by the author, as illustrated below. Thanks to comments and advice from all my professors and colleagues, I realized after publishing that there were some clear misjudgments and errors in these works. I sincerely apologize for the misguidance to any reader who has referred to the existing work. At the same time, I hope to get more feedback concerning this dissertation. Any errors in this paper, of course, are my own, and I am the only person who takes full responsibility for them.

Baek, Sangyub (2011) Udehegono soukan koubun [= Correlatives in Udihe]. *Northern language studies* 1: 101-114.

Baek, Sangyub (2012a) Tsunguusu shogo no WH soukan koubun no bunpu ni kansuru ruikei teki kousatsu [=A typological contemplation on the distribution of WH correlative in the Tungusic languages]. *Northern language studies* 2: 163-181.

Baek, Sangyub (2012b) An areal-typological view on the distribution of WH correlatives in the Tungusic languages. *Altai Hakpo* 22, 29-62.

Baek, Sangyub (2013) Udehego doushi setsuji -du no youhou -doushi hasei setsuji no ninshou hyouji kinou- [=Udihe verbal suffix -du: Function as the third person plural marker]. *Northern language studies* 3: 111-128.

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Baek, Sangyub (2015) Tsunguusu shogo ni okeru jyoukenbun no soui ni tsuite [=Differences of conditionals in the Tungusic languages]. *Northern language studies* 5: 129-152.

Baek, Sangyub (2016) Chiiki ruikeironteki kanten kara mita tsunguusu shogo no teidoushi ni okeru sanninshou hyouji [=Third person marking on finite indicative forms from the perspective of areal typology]. *Northern language studies* 6: 53-72.

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List of Abbreviations

1, 2, 3: 1st person, 2nd person, 3rd person	DIST: distributive
-: affix boundary	DIRINT: directional-intentional
=: clitic boundary	DS: different-subject
+: fusion	DUR: durative
ABL: ablative	E: epenthesis vowel
ACC: accusative	EMPH: emphatic element
AFF: affirmative	EXC: exclusive
Alien: alienable possession	F: feminine
ANT.CVB: anterior converb	FINIT: finite verb
ART: article	FOC: focus
ASS: associative	FUT: future
AT.CVB: attendant converb	GEN: genitive
ATT: attemptive	GRD: gerund
AUX: auxiliary	HAB: habitual
BEN: benefactive	IM.CVB: immediate converb
CA: connective adverbial	IMP: imperative
CAUS: causative	IMPF: imperfective
CAP: capable	IMPF.CVB: imperfective converb
CLF: classifier	IMPRS: impersonal
CLT: clitic	INC: inceptive
CMP: completive	INCL: inclusive
COHOR: cohortative	IND: indicative
COM: comitative	INDEF: indefinite
COMP: complement marker	INFR: inferential
CONC.CVB: concessive converb	INS: instrumental
COND.CVB: conditional converb	INT: intentional
CONT.CVB: continual converb	INTJ: interjection
COP: copula	INTR: intransitive
DAT: dative	IRLIS: irrealis
DEF: definite	ITER: iterative
DEG: designative case	LOC: locative
DIM: diminutive	M: masculine
DIR: directive	MOD.CVB: modal converb

MULT: multiple	PURP.CVB: purposive converb
N: neuter	Q: question particle / marker
NEG: negative	QUOT: quotative particle / marker
N.FUT: non-future	RECP: reciprocal
N.ITER: non-iterative	REF: reflexive
NLMZ: nominalizer / nominalization	REP: repetitive-reversive
NOM: nominative	RE.PST: remote past converb
N.PST: non-past	RES: resultative
OBL: oblique	RLIS: realis
OF: object-focus	SER.CVB: serial converb
OMTP: onomatopoeia	SF: S-focus
OPT: optative	SG: singular
PART: particle	SIM.CVB: simultaneous converb
PAS: passive	SS: same-subject
PERS: person ending	STAT: stative
PFV: perfective	SUBJ: subjunctive
PL: plural	TERM.CVB: terminative converb
PRED: predicative	TOP: topic
PROG: progressive	TR: transitive
PROP: proprietive	VBLZ: verbalizer / verbalization
PRP: proposition	VN: verbal noun
PRS: present	VOL: volitional
PST: past	VS: variable-subject
PTCP: participle	

Abstract

The present dissertation examines the Tungusic languages from the perspective of areal linguistics, centering on the southern Bikin dialect of Udihe. This study mainly consists of four syntactic issues: (i) third person marking on finite indicative forms, (ii) the converbal ending **-mi*, (iii) conditional forms, and (iv) correlatives.

First, taking the four typological parameters, namely obligatorily distinct, optionally distinct, non-distinct, and non-person marking types in terms of number distinction, the analysis demonstrates distinct patterns of third person marking on finite indicative forms in Tungusic in accordance with areal distribution, strikingly similar to those of neighboring languages. Second, the functional differences of the converbal ending **-mi* among the Tungusic languages are analyzed with the employment of the cross-linguistic morpho-syntactic and semantic typological standards of converbs from an areal perspective in relationship with the adjacent languages. Third, based on switch-reference and semantic classification for conditionals, different syntactic characteristics of conditional forms in Tungusic according to geographical distribution are clarified from the viewpoint of areal linguistics. Lastly, correlatives, the WH pronoun in the subordinate clause corresponding with the WH or DEM pronoun in the main clause, are revealed to show gradual syntactic variations among the Tungusic languages in similarity with those of Russian and Chinese correlatives depending on geographical position, in terms of correlative types and verb forms in the correlative clause.

In conclusion, the syntactic differences among the Tungusic languages strongly correlate with areal distribution, classified into three groups; (i) North Tungusic, (ii) East Tungusic, and (iii) South Tungusic. First of all, North Tungusic, spoken in the northern Siberian region, shares similar syntactic characteristics with Kolima Yukaghir, Sakha, Russian, and Mongolic. Second, East Tungusic in the Russian Far East retains the grammatical features of Russian, Mongolic, and Chinese at low or intermediate levels. Third, South Tungusic languages inside the Chinese border are heavily influenced by Mongolic and Chinese. Consequently, the areal-based distinctions among three Tungusic groups at the syntactic level are attributed to the influences from different neighboring languages and different degrees of influence from the same adjacent languages.

Chapter I Introduction

Chapter I

Introduction

1.1. Objectives

The main objective of this dissertation is to examine the Tungusic languages from the perspective of areal linguistics, focusing on the Bikin dialect of Udihe. In this thesis, I concentrate on the four linguistic factors in Tungusic, namely (i) third person marking on finite indicative forms, (ii) the converbal ending **-mi*, (iii) conditional forms, and (iv) correlatives. The present study will demonstrate that grammatical variations in Tungusic depend on geographical distribution. It will also raise the possibility that areal-based syntactic differences among the Tungusic languages are strongly related to the influence of neighboring languages, rather than internal changes.

This introductory chapter is organized as follows: § 1.2 gives an overview of the Tungusic and adjacent languages (i.e., Kolyma Yukaghir, Sakha, Russian, Mongolic (Buryat, Dagur, and Khalkha), and Chinese) in the Northeast Asian region; in § 1.3, I conduct a general typological comparison between the Tungusic and neighboring languages; then, § 1.4 introduces a theoretical framework of “areal linguistics” for this study; linguistic data, used in examinations of the above four syntactic issues, are given in § 1.5; lastly, § 1.6 lays out the structure of this thesis.

1.2. Languages

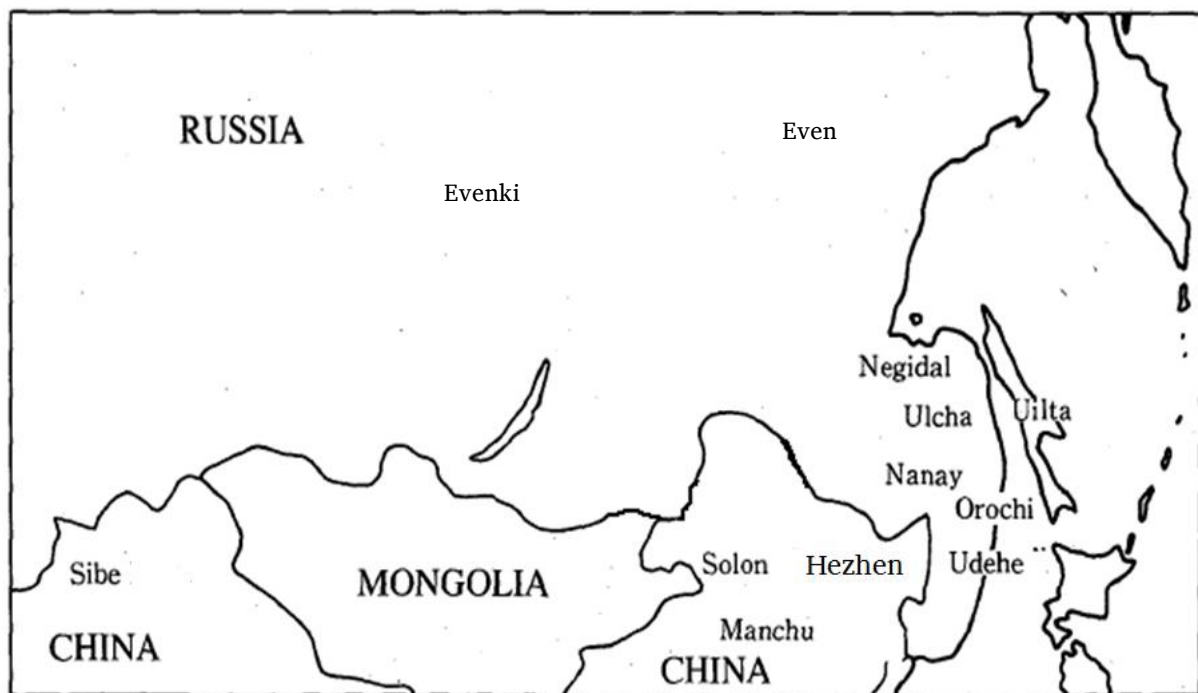
In § 1.2, I present an introduction on the Tungusic and neighboring languages, which are the main targets for discussion in this dissertation.

1.2.1. Tungusic

As illustrated in Map 1-1, Tungusic is a language family, distributed across the Russian (specifically Eastern Siberia, the Russian Far East, and Sakhalin Island) and Chinese (northeastern and Xinjiang Uyghur autonomous provinces) territories. The term “Tungusic” was used in the 17th and 18th centuries and referred to either as Evenki alone or as Evenki and Even together; both are sub-dialects of Tungusic. Since then, “Tungusic” has been used to indicate the Tungusic languages except Manchu, due to the

prominent phonological and grammatical distinctions between Manchu and other Tungusic dialects. Nowadays Tungusic generally includes the following approximately 10~11 languages: Evenki, Even, Negidal, Ulcha, Nanay, Orochi, Uilta, Udihe, Solon, Manchu, and Sibe. Each Tungusic dialect is regarded as a separate independent language.

Map 1-1. Distribution of the Tungusic languages (from Tsumagari (1997a: 176) with a minor change)



• Genetic classification

Figure 1-1. Classification of the Tungusic languages (Ikegami 1974)

- I: Evenki (Ek), Even (E), Negidal (N), Solon (S)
- II: Udihe (U), Orochi (Oc), Hezhen (Hz)
- III: Nanay (Nn), Ulcha (Ol), Uilta (Ut)
- IV: Manchu (M), Sibe (Sb)

As shown in Figure 1-1, Tungusic is genetically classified into four groups, proposed by Ikegami (1974). Concerning Hezhen, traditionally considered the Nanay

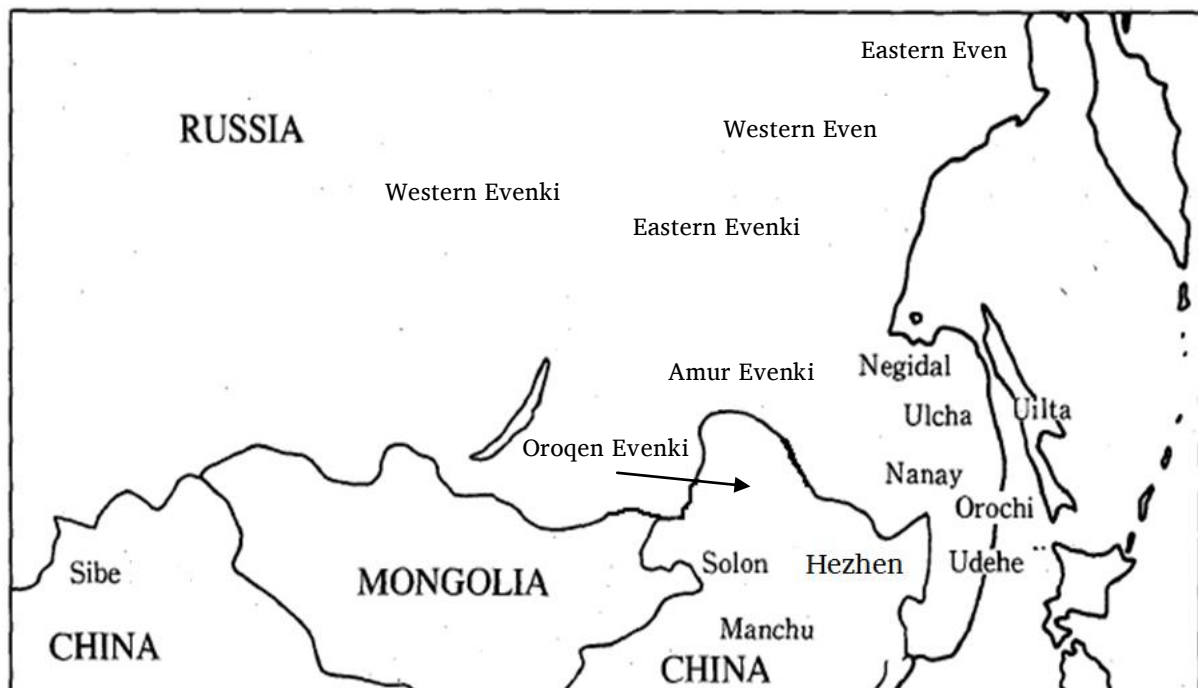
dialect on the Chinese border, I follow Kazama's (1996a) classification and categorize it as the second group of Tungusic.

• Geographical distribution of Tungusic

As confirmed in Map 1-1, Evenki and Even are mostly spoken in the northeastern Siberian region, whereas Solon, Hezhen, Manchu, and Sibe belong to the Chinese territory. The rest of the Tungusic languages (i.e., Negidal, Ulcha, Nanay, Orochi, Uilta, and Udihe) are spoken near the Russian Far Eastern area, in the middle of North and South Tungusic. Hence, Tungusic can be grouped into three categories according to areal position as follows: (i) North Tungusic (Evenki, Even), (ii) East Tungusic (Negidal, Ulcha, Nanay, Orochi, Uilta, and Udihe), and (iii) South Tungusic (Solon, Hezhen, Manchu, and Sibe). Among them, Udihe (also known as Udeghe or Udige) is one of the East Tungusic languages, spoken in the southernmost area of the Russian Far East region, near the Chinese border. The present discussion will proceed from the aforementioned genetic classification and areal distribution of Tungusic.

• Dialects of Tungusic

Map 1-2. Distribution of the Tungusic languages from the perspective of dialectal varieties



From the perspective of dialectal varieties, as shown in Map 1-2, Evenki generally consists of four dialects (Western Evenki, Eastern Evenki, Amur Evenki, and Oroqen Evenki), while Even is grouped into Western and Eastern dialects. In this dissertation, Western Evenki and Western Even are respectively adopted as representing dialects for Evenki and Even. Moreover, Udihe is divided into two dialects relying on areal distribution: northern Xor, and southern Bikin; this study mainly focuses on the Bikin dialect. The difference between dialects in each Tungusic language is not referenced unless there are conspicuous disparities between them.

1.2.2. Neighboring languages

Map 1-3. Distribution of the Tungusic and neighboring languages



As illustrated in Map 1-3, the Tungusic languages are contiguous with a variety of other languages. In this dissertation I focus mainly on Kolima Yukaghir, Sakha, Russian, Mongolic (Buryat, Dagur, and Khalkha), and Chinese. Kolima Yukaghir is one of the Paleo-Asiatic languages in the neighborhood of Evenki and Even. Sakha, also known as Yakut, is a Turkic language spoken in the northeastern Siberian region, near North Tungusic. As most Tungusic languages span the Russian territory, Russian has been a dominant language on North and East Tungusic. With regard to the Mongolic languages,

Buryat, Dagur, and Khalkha neighbor the East and South Tungusic languages. Lastly, Chinese is a powerful language in the southern area, and has had an enormous impact on South Tungusic. In addition to the above-mentioned contiguous languages, Khamnigan Mongol, Chahar Mongolian, Kazakh, and Uyghur are also included in discussion in accordance with certain syntactic issues in this study.

1.3. Typological overview

Some linguists have claimed that Tungusic may be genetically related to Mongolic and Turkic (as well as Korean and Japanese) under “the Altaic language family” hypothesis. However, genetic relationships between these language groups have not been scientifically proven and still remain controversial. Therefore, “the Altaic type,” coined by Kamei et al. (1996), is the term most frequently used of late, to convey typological similarities between the above-mentioned languages, without making assumptions about genetic relationships.

Table 1-1. Typological features of the Tungusic and adjacent languages

	phonology	morphology	syntax		
			case-marking	attributive	word order
K. Yukaghir	vowel harmony	agglunative	NOM-ACC	AN	SOV
Sakha	vowel harmony	agglunative	NOM-ACC	AN	SOV
Russian	consonant harmony	inflectional	NOM-ACC	AN	SVO
Tungusic	vowel harmony	agglunative	NOM-ACC	AN	SOV
Mongolic	vowel harmony	agglunative	NOM-ACC	AN	SOV
Chinese	-	isolating	-	AN	SVO

The general typological features of the Tungusic and adjacent languages are organized in Table 1-1. We can observe that Kolima Yukaghir, Sakha, Tungusic, and Mongolic all retain the phonological feature of vowel harmony. Additionally, these languages are all suffix-only agglutinative types, syntactically characterized as containing AN, SOV word orders with nominative-accusative case-markings. In contrast, Russian and Chinese lack such vowel assimilations at the phonological level, and are classified as inflectional and isolating types with AN and SVO respectively. In

sum, Tungusic shows similar typological characteristics with Kolima Yukaghir, Sakha, and Mongolic, but not Russian or Chinese.

1.4. Theoretical framework

As quoted below, Trubetzkoy (1928) first introduced the term “sprachbund.” This term refers to the sharing of morphological and syntactic structures among genetically-distinct languages that are spoken in close proximity.

Groups composed of languages which show a high degree of similarity with respect to syntax, a similarity in the principles of morphological construction, and which offer a large number of common culture words, sometimes also an outward similarity in the phonological inventories, – but which possess neither systematic sound correspondences, nor has any correspondences in the phonological make up of the morphological units nor any common basic lexical items – such languages groups we call Sprachbünde.

(Trubetzkoy 1928: 18)

Furthermore, Thomason (2001: 99) similarly, but more specifically, defines “linguistic area or sprachbund (hereafter in this dissertation referred to as “areal linguistics”)” as “a geographical region containing a group of three or more languages that share some structural features as a result of contact rather than as a result of accident or inheritance from a common ancestor.”

Figure 1-2. Six criteria for areal linguistics (Based on Thomason 2001)

1) Geographical region	Northeast Asian region
2) Three or more languages	Kolima Yukaghir, Sakha, Russian, Tungusic, Mongolic, Chinese
3) Shared structural features	“main target”
4) Contact	+
5) Not accident	+
6) Not inheritance	+

He proposes the six criteria of areal linguistics shown in Figure 1-2. As this figure indicates, the author lists languages in accordance with these standards. That is to say, I place a focus on areal-based shared structural features among Tungusic neither by

accident nor by inheritance, but instead resulting from the contact between the Tungusic and neighboring languages of Kolima Yukaghir, Sakha, Russian, Mongolic, and Chinese, in Northeast Asia.

1.5. Linguistic data

In this study, the linguistic data shown in Tables 1-2 and 1-3 (pp. 9-10), consisting of data from previous studies, descriptive grammars, and textual materials, are used to examine the Tungusic and neighboring languages from the perspective of areal linguistics. For the Bikin dialect of Udihe, linguistic materials, obtained from the fieldwork by the author, will also be used¹. Additionally, some linguistic data on Uilta, Sakha, Buryat, and Khalkha Mongolian are provided by other researchers and consultants, whose sources are detailed in the footnotes. Furthermore, the transcriptions, gloss analysis, English translations are on my own, thus they can be different from the original sources.

1.6. Dissertation Structure

This present thesis is structured as follows: In Chapter II, I review the previous literatures on Tungusic, analyzed from the micro and macro viewpoints of areal linguistics. Chapter III then clarifies third person marking patterns on finite indicative forms in Tungusic, from the framework of areal linguistics. Chapter IV reveals the functional differences in the widely used converbal ending **-mi* in Tungusic from an areal typological perspective. Chapter V examines the distinctions of conditional forms among the Tungusic languages, from the viewpoint of areal linguistics, by adopting switch-reference and semantic classifications for conditional constructions. Chapter VI explores possible influences of Russian and Chinese on correlative constructions in Tungusic, based on the areal-typological perspective of correlation type and verb forms in the correlative clause. Lastly, Chapter VII gives the conclusions of this dissertation.

¹ Note that my Udihe consultant, Aleksandr Aleksandrovich Kanchuga (1934-), is the author of Kanchuga and Tsumagari (2002, 2010). He is relatively younger (by about ten years) than the consultants in Kazama's text. For this reason, his Udihe data may be influenced by Russian; however, I believe that these data still retain value for linguistic examination.

Table 1-2. Linguistic data I (Tungusic) (Ek: Evenki, E: Even, N: Negidal, S: Solon, U: Udihe, Oc: Orochi, Hz: Hezhen, Ol: Ulcha, Nn: Nanay, Ut: Uilta, M: Manchu, Sb: Sibe)

I	Ek	Western Ek. - Literature: Konstantinova (1968), Nedjalkov, I. V. (1995, 1997), Bulatova and Grenoble (1999), Text: Vasilevič (1936), Ikegami (2002a)
	E	Western E. - Literature: Benzing (1955), Novikova (1968), Malchukov (1995, 2008), Text: (Pakendorf fielddata ²)
		Eastern E. - Literature: Kazama (2003b, 2009b), Kim (2011), Text: (Pakendorf fielddata)
II	N	Literature: Kolesnikova and Konstantinova (1968), Cincius (1982), Kazama (2002), Pevnov and Khasanova (2003) , Text: Cincius (1982), Kazama (2002), Pevnov and Khasanova (2003)
	S	Literature: Poppe (1931), Hu and Chaoke (1986), Chaoke et al.(1991), Tsumagari (2009a), Sung et al. (2010), Kazama (2011b, 2013), Text: Kazama (2007c, 2008d)
	U	Xor U. - Literature: Shnejder (1936), Kormushin (1998), Text: Kormushin (1998) Bikin U. - Literature: Nikolaeva and Tolskaya (2001), Girfanova (2002), Kazama (2010a), Text: Kazama (2004, 2006a, 2007a, 2008a, 2009a, 2010a)
III	Oc	Literature: Avrorin and Lebedeva (1968), Avrorin and Boldyrev (2001) Text: Kazama (1996b)
	Hz	Literature: An (1986), Li (2006), Tamura (2008), Text: Tamura (2008) , Li (2011, 2012, 2013, 2014a, 2015)
	Ol	Literature: Sunik (1985), Kazama (2010c), Text: Sunik (1985), Kazama (2006c, 2008c, 2010c)
IV	Nn	Literature: Avrorin (1961, 1981), Kazama (2010b, 2011a) Text: Kazama (2001, 2005, 2006b, 2007b, 2008b, 2010b)
	Ut	Literature: Petrova (1967), Ikegami (2001 (1959)), Magata (1981), Tsumagari (2009b), Ozolinja (2013), Yamada (2013), Text: Ikegami (2002b)
	M	Literature: Möllendorff (1892), Zaxarov (1879), Sung (1968), Tsumagari (1981, 2002), Li (2000), Avrorin (2000), Gorelova (2002), Text: Choi et al. (2012a, 2012b)
	Sb	Literature: Norman (1974), Li et al. (1982), Li and Zhong (1986), Chaoke (2006), Sameng et al. (2010), Kubo et al. (2011), Kubo and Kogura (2013), Kogura (2007, 2013)

² As far as Even (Western and Eastern dialects) is concerned, Dr. Brigitte Pakendorf has generously allowed me to use her fieldwork data. I would like to express my sincere gratitude for her generosity.

Table 1-3. Linguistic data II (neighboring languages) (K.Y.: Kolima Yukaghir, Sk: Sakha, R: Russian, B: Buryat, D: Dagur, K: Khalkha, C: Chinese)

K.Y.	Literature: Maslova (2003), Nagasaki (2013), Text: Maslova (2001)
Sk	Literature: Korkina (1985), Stachowski and Menz (1997), Ebata and Popova (2006), Ebata (2011, 2013), Pakendorf (2007)
R	Literature: Boguslavskij (1997), Wade (2011 (1992)), Shiota (2010)
B	Literature: Poppe (1960), Bertagaev and Sydendambaev (1962), Kuribayashi (1992), Skribnik (2003), Text: Barannikova et al. (1993, 2000)
D	Literature: Martin (1961), Zhong (1982), Todaeva (1986), Tsumagari (2003), Sung et al.(2010), Text: Enhebatu et al. (1985), Todaeva (1986), Wu (1994)
K	Literature: Kullmann and Tserenpil (1996), Janhunen (2012), Yamakoshi (2012)
C	Literature: Aihara et al. (1996), Lu (2002), Ogawa (2006), Sun (2006), Takahashi (2006)

Chapter II Review of literature

Chapter II

Review of Literature

Chapter II reviews previous literature on the Tungusic languages, discussed from the perspectives of micro and macro areal linguistics. In this study, micro areal linguistics is distinguished from macro areal linguistics in that “micro areal linguistics” is restricted to the change within individual or small group of Tungusic as a result of contact with adjacent languages, whereas “macro areal linguistics” broadly refers to areal-based linguistic differences among more than three Tungusic languages. § 2.1 introduces the precedent accounts of each Tungusic language, covered from the perspective of language contact at the micro level. In § 2.2, I present the precedent works on the Tungusic languages from a macro areal typological point of view. Lastly, § 2.3 provides an overall review on the preceding areal linguistics research of Tungusic.

2.1. Tungusic from the perspective of micro areal linguistics

In reference to Tungusic classification by Ikegami (1974), § 2.1 gives a general overview of precedent accounts of individual or small groups of Tungusic languages from the micro viewpoint of areal linguistics.

2.1.1. First group

As mentioned in the introductory chapter, Evenki and Even, in the northeastern Siberian area, are in neighborhood with Kolima Yukaghir, Sakha, and Russian. Romanova et al. (1975) state that Eastern Evenki bears resemblances with Sakha at phonological, morphological, and lexical levels, mostly concentrating on the lexical influence of Sakha on Eastern Evenki. Ikegami (1993) also remarks on the presence of Sakha syntactic features in Evenki (including Western Even), such as the use of nominative pronouns as possessors. Furthermore, Ikegami (2004) assumes that syntactic phenomena in Evenki, e.g. agreement in case and the use of the interrogative pronoun as a relative marker, may have resulted from Russian influence. Within Oroqen Evenki in Northeastern China, Li (2005) considers the morphological and syntactic changes (e.g. emphatic reduplication, the loss of agreement in number and person) to be of Mongolic or Chinese influence. With respect to Even, Malchukov (1995) comments that the Western dialect, in addition to Russian influence in syntax and vocabulary, shares

similar phonological and morphological features (e.g. the development of diphthongs and the loss of possessive forms of personal pronouns) with Sakha in contrast with the Eastern dialect. However, there had been no specific previous literature focusing on Negidal with the perspective of language contact. Recently, Gusev (2015) has examined the syntactic correspondences, i.e. the first-person singular imperative form, the hearsay particle, and the locative case, in Negidal (including other East Tungusic languages) and Amur Nivkh through the concept of areal linguistics. As for Solon, Tsumagari (2009a) indicates that the syntactic and lexical features of Mongolic (Mongolian, Dagur) and Chinese, namely the borrowing of grammatical and lexical elements (e.g. comitative and topic markers) and loan translations, can be observed in it. Kazama (2011b) also asserts that morpho-syntactic characteristics, e.g. the coordinative form for connecting a noun phrase, auxiliary verbs, quotative markers, and clitics, in Solon are considered to be strongly attributed to Mongolian influence.

2.1.2. Second group

Udihe is known to be co-influenced by Russian and Chinese. According to Nikolaeva and Tolskaya (2001), Udihe has been under the strong influence of Chinese since 14c, stemming from the geographical location of Udihe, situated in the most southern area near the Chinese border. Specifically speaking, Coati (1992) and Aotegentitige (2005) shed a light on Chinese influence on Udihe at a lexical level. Girfanova (2002) also suggests that there are many lexical borrowings from Chinese, in particular related to agriculture, in which the origins of loanwords can be easily speculated based on phonological similarities. Furthermore, Janhunen (1999) proposes that the rich vowel paradigm in Udihe, namely “neutral (V), lengthening (VV), glottalizing (VqV) or pharyngealizing (VhV),” can be understood as a tonal type of language, which may result from Chinese influence. Tsumagari (2010) also analyzes the Bikin Udihe in phonology and grammar from an areal perspective, supposing that mono syllabication, the prominent development of the open syllable, and the loss of grammatical distinctions reflecting the process of turning into an isolating type of language are regarded to originate from contact with Chinese. Nowadays, Udihe speakers are strongly influenced by Russian, as attested in Nikolaeva and Tolskaya (2001) and Kazama (2010a). Concerning Orochi, few remarks, with the exception of those on Russian influence at a lexical level, have been made in respect to language contact because there is not much previous literature on Orochi. With regard to Hezhen,

Tsumagari (1993) elucidates the morphological and syntactic differences between Nanay in the Russian territories and Hezhen in the Chinese region in certain grammatical features (e.g. use of genitive and designative cases, reduplication, formation of the imperative form with a verb stem, non-plural marking of converb in *-mi*), implying that most of these characteristics in Hezhen are related to the influence of Manchu.

2.1.3. Third group

Few previous accounts have been done on Nanay and Ulcha from the position of areal linguistics. Kazama (2010b) makes comments on lexical borrowing in Nanay from Chinese and Russian. Moreover, according to Kazama (2010c), there is evidence of loanwords from Khalkha Mongolian, Nivkh, and Russian in Ulcha. Concerning Uilta, Tsumagari (1997b) proposes possible language contact among Nivkh, Uilta, and Ainu, concentrating on the typological patterns of noun juxtaposition among the three genetically-unrelated languages. Moreover, based on the linguistic situation in Sakhalin and dialectal differences within Uilta, Yoshiko (2010, 2013) suggests three stage of language contact involving Uilta and Evenki, Nivkh, Ainu, Russian, Japanese.

2.1.4. Fourth group

Ikegami (1999 (1979)) claims that the syntactic peculiarities in Manchu in relationship with other Tungusic languages, e.g. lack of person or reflexive endings, formation of the imperative form with a verb stem, post-verbal negative construction, the simplified case system, and loanwords, are attributed to Mongolian influence. Concerning Sibe in the Xinjiang Uyghur autonomous region where Chinese, Uyghur, and Kazakh are commonly used in daily life, lexical borrowings from the Mongolian, Uyghur, and Kazakh languages are reported in Li and Zhong (1986).

2.2. Tungusic from the perspective of macro areal linguistics

§ 2.2 introduces Tsumagari (1996, 1997a) and Anderson (2006a) on the Tungusic languages, analyzed from the viewpoint of macro areal linguistics. Tsumagari (1996: 179) establishes three stages, Mongolian influence (1269-1368), Manchu influence (1616-1912), and Chinese and Russian influences (20C-), to account for possible influences on Tungusic.

2.2.1. Tsumagari (1996, 1997a)

Tsumagari (1996, 1997a) are the first comprehensive studies, focused on Tungusic from the perspective of macro areal linguistics. Dividing Tungusic into two groups by territory (i.e., Russian and Chinese Tungusic), Tsumagari (1996) refers to the grammatical differences between the two groups. In addition, as shown in Figure 2-1, Tsumagari (1997a) illustrates not only the syntactic distinctions between Russian and Chinese Tungusic but also the co-sharing of similar syntactic features in Low Amur and Chinese Tungusic languages.

Figure 2-1. Grammatical variations among Tungusic from an areal perspective (Tsumagari 1997a)

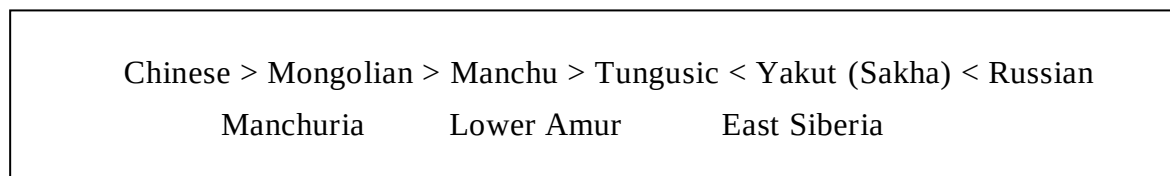
Russian Tungusic · Case government · Relative pronoun use of interrogative pronoun · Adjective and noun agreement in number, case, and person
Low Amur and Chinese Tungusic · Presence of a pronominal genitive · Absence of the alienability suffix · Presence of postverbal negative construction · Relative-like usage by juxtaposed interrogatives
Chinese Tungusic · Presence of a genitive case for both nouns and pronouns · Absence of the alienability suffix · Absence of the designative case · Emphatic reduplication of adjectives · Absence of agreement between modifier and noun

Specifically, the syntactic characteristics (e.g., case government, relative pronoun use of interrogative pronoun, and adjective and noun agreement in number, case, and person), similar to Russian, are restricted to Tungusic in the Russian territory. In contrast, Tungusic on the Chinese side displays prominent distinctions compared to Russian Tungusic: presence of a genitive case for both nouns and pronouns, absence of the

alienability suffix, absence of the designative case, emphatic reduplication of adjectives, and absence of agreement between modifier and noun. Moreover, some linguistic features, such as presence of a pronominal genitive, absence of the alienability suffix, presence of postverbal negative construction, and relative-like usage by juxtaposed interrogatives, are commonly observed in Tungusic around the Low Amur and Chinese regions.

As illustrated in Figure 2-2, furthermore, Tsumagari (1997a) supposes that Manchu, heavily influenced by Mongolian and Chinese, had been a major language among Tungusic in Manchuria and the Lower Amur region, excluding possible influence on Tungusic in East Siberia from Manchu, Mongolian, and Chinese in terms of grammatical structure. Instead, Evenki or Even in northern Siberian area is mentioned to share similarities with Sakha and Russian at grammatical level.

Figure 2-2. Hierarchy of Tungusic and neighboring languages in terms of relative prestige (Tsumagari 1997a: 183)



2.2.2. Anderson (2006a)

Taking Tungusic, Chukotko-Kamchatkan, Eskimo-Aleut, Yeniseic, Ob-Ugric, Samoyedic, Mongolic, Turkic, Nivkh, and Yukaghiric into considerations, Anderson (2006a) examines various ranges of linguistic features, e.g., phonology, nominal and verbal morphological system, the opposition of dative and allative case forms, and of instrumental and comitative case forms, in the Siberian languages from the perspective of macro areal linguistics, proposing that the similar patterns between North Tungusic and neighboring Siberian languages are possibly created by areal-based contacts.

2.3. Review

I have reviewed previous literatures on Tungusic from the perspective of micro and macro areal linguistics. As a result, we can attest that most of the precedent work is

focused on grammatical change within certain individual or small groups of Tungusic languages with the approach of micro areal linguistics, while few studies so far analyze all of the Tungusic languages from the perspective of macro areal linguistics. In addition, even some previous studies based on macro areal linguistics tend to concentrate on linguistic distinctions among Tungusic, either within the Siberian regions excluding Tungusic on the Chinese side or on the basis of a territorial borderline, i.e. Chinese and Russian territories. Therefore, a study concentrically targeting the whole Tungusic languages and adjacent Kolima Yukaghir, Sakha, Russian, Mongolic, and Chinese from the viewpoint of macro areal linguistics has not been conducted in detail. Besides, there are still many linguistic features in Tungusic open to discussion in the field of areal linguistics.

Chapter III Third person markings on finite indicative forms

Chapter III

*Third person marking on finite indicative forms*³

As to whether or not person is grammatically encoded in a verbal predicate, languages are cross-linguistically classified into two types, namely person marking and non-person marking types. As illustrated in (3-1), Latin requires the attachment of a person element, fused with a tense/mood category, to verbal predicate morphology. In contrast, Japanese is categorized as a non-person marking type of language, and requires no person marker in a sentence-final verb, as shown in (3-2).

· *person marking type (Latin)*

- 3-1) *vulgus* *hīc* *est.*
crowd.M.SG.NOM here be.IND.PRS.3SG
‘The crowd is here.’

(Mondon 2015: 59)

· *non-person marking type (Japanese)*

- 3-2) *kjou* *kare-ha* *gakkou-e* *ik-u.*
today he-TOP school-DIR go-N.PST
‘Today, he goes to school.’

The purpose of this chapter is to examine third person marking on finite indicative forms in Tungusic from the perspective of areal linguistics. The present chapter is composed of five parts. In § 3.1, a typological parameter of third person marking in verbal predicate structures on the basis of number distinction is introduced. This standard is then applied in § 3.2 to third person marking on finite indicative endings in Udihe. At the same time, I reexamine the grammatical function of the verbal derivational suffix *-du* as a third person plural marker, which is essential to precisely clarify the patterns of third person endings in Udihe. The discussion in § 3.3 focuses on third person suffixes on finite indicative forms in all Tungusic languages. Following this, §

³ Note that § 3.1, § 3.3, and § 3.4, presented at the International Conference, Northeast Asia, North Pacific as a Linguistic Area (Sapporo, Aug. 20-21, 2015), are an English version of Baek (2016). In addition, § 3.2 is a revised and extended English version of Baek (2013, 2014a), the latter of which was read at the 11th Seoul International Altaistic Conference (Seoul, Dec. 6-7, 2013).

3.4 extends the scope of the observation to a number of adjacent languages (Kolima Yukaghir, Russian, Turkic (Sakha, Kazakh, and Uyghur), Mongolic (Buryat, Dagur, and Khalkha), and Chinese) in the vicinities of Tungusic. Finally, § 3.5 summarizes the main points made in this chapter.

· Definition of finite indicative forms

As referred to by Trask (2003), “finite indicative forms” in this study are defined as verbal endings, functioning only as sentence-final verb predicates, “associated with the uttering of a statement which the speaker believes to be true”, with the exceptions of imperative, subjunctive, and optative moods.

3.1. Typological parameters for third person marking⁴

This section offers an overview of a typological standard of verbal person marking for third person. In this study, the focus is on number distinction in third person. According to number opposition between third person singular and plural, person marking languages can be categorized into three types, namely (i) obligatorily distinct, (ii) optionally distinct, and (iii) non-distinct. As (3-3) and (3-4) demonstrate, Spanish is a person marking language with mandatory number distinction for third person. In contrast, Turkish belongs to optionally distinct language group, in that the plural element *-lar* is selectively used to distinguish between third person singular and plural, as indicated in (3-5). Finally, Ainu (3-6) does not have such an opposition in third person number, as the same person marker is used for third person singular and plural, unlike the case for first and second person.

(i) obligatorily distinct (Spanish)

· 3rd person singular

3-3) (él)	amat	<i>la</i>	<i>chica.</i>
he	love.IND.PRS.3SG	DEF.ART	girl
‘[He] loves the girl.’			

⁴ Note that the employment of person endings for third person marking should be completely limited to the third person subject. Hence, a plural or reciprocal (or sociative) suffix, appearing on finite indicative categories in other plural subjects as well, is not be regarded as a third person plural element in this study, although it can create a third person plural marking effect in terms of the entire person-marking system.

· 3rd person plural

3-4) (*ellos*) **amant** *la* *chica*.
 they love.IND.PRS.3PL DEF.ART girl
 ‘[They] love the girl.’

(ii) *optionally distinct (Turkish)*

· 3rd person singular or plural

3-5) **gel-ijor-Ø**.
 come-PRS-3
 ‘[(S)he] comes.’ or ‘[They] come.’

· 3rd person plural

gel-ijor-lar.
 come-PRS-PL
 ‘[They] come.’

(Hayashi 2013: 142)

(iii) *non-distinct (Ainu)*

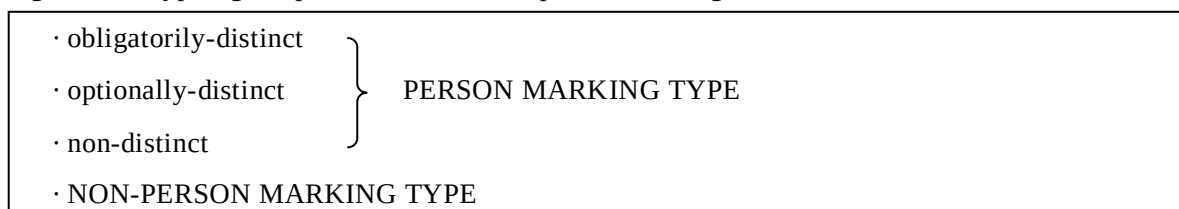
· 3rd person singular or plural

3-6) **itak-Ø**.
 speak-3
 ‘[(S)he] speaks.’ or ‘[They] speak.’

(Shibatani 1990: 25-26)

Adopting the four typological criteria for third person marking, as schematized in Figure 3-1, this study specifies the features of third person marking on finite indicative forms in Tungusic and adjacent languages from the perspective of areal linguistics. Note that a non-person marking type is an additional factor in the parameters to cover such a possibility.

Figure 3-1. Typological parameters for third person marking



3.2. Udihe

Third person marking on finite indicative forms in Udihe is analyzed in § 3.2. In 3.2.1, the above-mentioned typological parameters are applied to third person markers

on finite indicative endings in Udihe with reference to previous literature. Following this, 3.2.2 reexamines the controversial grammatical function of the verbal derivational suffix *-du* as a third person plural marker in order to classify accurately the features of third person endings in Udihe.

3.2.1. Third person marking on finite indicative forms in Udihe

Table 3-1. Finite verbs in Udihe⁵ (Based on Girfanova 2002 and Kazama 2010a)

	PRS (-ø-)	PST (-A'-)	FUT (-jA-)	OPT (-tA-)	SUBJ (-musə-)
1SG	<i>V-ø-mi</i>	<i>V-A'-i</i>	<i>V-jA-mi</i>	<i>V-tA-mi=jə</i>	<i>V-musə-i</i>
2SG	<i>V-ø-i</i>	<i>V-A'-i</i>	<i>V-jA-i</i>	<i>V-tA-i=jə</i>	<i>V-musə-i</i>
3SG	*V-ø-ø → PTCP	V-A'-ø	V-jA-ø	V-tA-ø=jə	V-musə-ø
1PL.EXC	<i>V-ø-u</i>	<i>V-A'-u</i>	<i>V-jA-u</i>	<i>V-tA-u=jə</i>	<i>V-musə-u</i>
1PL.INCL	<i>V-ø-fi</i>	<i>V-A'-fi</i>	<i>V-jA-fi</i>	<i>V-tA-fi=jə</i>	<i>V-musə-fi</i>
2PL	<i>V-ø-u</i>	<i>V-A'-u</i>	<i>V-jA-u</i>	<i>V-tA-u=jə</i>	<i>V-musə-u</i>
3PL	*V-ø-ø → PTCP	V-A'-ø	V-jA-ø	V-tA-ø=jə	V-musə-ø

Table 3-2. Participle verbs in Udihe (Based on Girfanova 2002 and Kazama 2010a)

	PRS (-i-)	PST (-A-)	FUT (-jAηA-)
1SG	<i>V-ø-mi</i>	<i>V-A-i</i>	<i>V-jA-mi</i>
2SG	<i>V-ø-i</i>	<i>V-A-i</i>	<i>V-jA-i</i>
3SG	V-i-ni	V-A-ni	V-jA-ni
1PL.EXC	<i>V-ø-u</i>	<i>V-A-u</i>	<i>V-jA-u</i>
1PL.INCL	<i>V-ø-fi</i>	<i>V-A-fi</i>	<i>V-jA-fi</i>
2PL	<i>V-ø-u</i>	<i>V-A-u</i>	<i>V-jA-u</i>
3PL	V-i-ti	V-A-ti	V-jA-ti

⁵ There is no form of the finite present tense in the third person, which is replaced by the participle verb (c.f., Malchukov 2000: 452-453).

As illustrated in Tables 3-1 and 3-2, verb forms in Udihe are divided into two types as follows: (i) finite verb [indicative: PRS: *V-∅-PERS*, PST: *V-A'-PERS*, FUT: *V-ǰA-PERS*, subjunctive: *V-musə-PERS*, and optative: *V-tA-PERS=ǰA*] and (ii) participle verb [PRS: *V-i-PERS*, PST: *V-A-PERS*, FUT: *V-ǰAηA-PERS*]. Taking Tables 3-1 and 3-2 into considerations, it is clear that person suffixes for third person singular and plural on finite verb forms (indicative, subjunctive, and optative) are all marked by *-∅* and there is no distinction between third person singular and plural, in contrast to the case of participle verb forms. This explains why third person marking on finite indicative forms in Udihe is regarded as making it a non-distinct language in terms of number distinction in this study.

As illustrated in (3-7), however, the Bikin dialect of Udihe has the verbal derivational suffix *-du*, which appears to be associated with the third person plural subject. Previous studies have raised some controversy regarding this issue.

• Bikin Udihe

3-7) *anana* *njaula-ǰiga* *jəu* ***gusi-du-ǰə?***
 a.long.time.ago child-PL what play-PL-FUT
 ‘A long time ago, what could children play for fun?’

(Kazama 2004: 470)

3.2.2. Grammatical function of the verbal derivational suffix *-du*

In 3.2.2, I reexamine the grammatical function of the verbal suffix *-du* to clarify its relationship with the third person plural marker. This examination is central to determining the characteristics of third person marking on finite indicative forms in Udihe.

3.2.2.1. Previous studies

Regarding the grammatical function of the verbal suffix *-du*, disagreement exists between the two previous accounts of Nikolaeva and Tolskaya (2001) and Kazama (2003a, 2007d, and 2008e).

3.2.2.1.1. Nikolaeva and Tolskaya (2001)

As per Figure 3-2 and the text quoted below it, Nikolaeva and Tolskaya (2001: 213) claim that the verbal suffix *-du* serves as a person marker for third person plural in the following finite verbal categories: permissive, subjunctive, perfect and conditional (defined respectively as optative, finite future, finite past and subjunctive in this paper). These authors observe that the position of *-du* differs from that of ordinary person endings. However, they do not explain why only the third person plural marker takes different positions to other person markers.

Figure 3-2. Distribution of person inflections (Nikolaeva and Tolskaya 2001: 213, the square and parenthesized parts are mine)

Type I	Present
Type II	Permissive (= Optative), Subjunctive (= Finite Future)
Type III	Perfect (= Finite Past), Conditional (= Subjunctive)
Type IV	Future, Converbs, Present Participle, Future Participle
Type V	Past, Past Participle
Type VI	Imperative

Personal inflections usually occupy the rightmost position in the word, that is, they follow these affixes. The only exception is the 3rd person inflection -du- in the II and the III paradigmatic types which immediately follows the verbal stem and therefore precedes the tense/mood marker, or the marker of the non-finite form, for example, atata-du-ǰa 'let them work' <work-PL-SUBJ (=FUT) >. Moreover, for class I verbs ending in -i or -u whose Perfect stem is derived by the element -ga-, the 3rd Plural inflection -du- precedes this element -ga-. For example: umi-du-ga 'they have drunk' <drink-PL-PERF (=PST)>.

(Nikolaeva and Tolskaya 2001: 213)

In addition, Nikolaeva and Tolskaya (2001) present the finite verbal paradigm set out in Table 3-3. Negation in Udihe is formed by the negative auxiliary verb *a-*, followed by the tense/mood marker and person endings in order, and the verb stem remains on its own (c.f. Figure 3-3 and examples (3-8 and 3-9)).

Table 3-3. Verbal paradigm (finite past and future) in Udihe (Nikolaeva and Tolskaya 2001: 244-245: *bu-* ‘give’, *jəxə-* ‘sing’, the parenthesis is mine)

	PERF (=PST)	NEG	SUBJ (=FUT)	NEG
1SG	<i>bu-gə-i</i>	<i>ə-s’ə-i bu</i>	<i>jəxə-ǰə-mi</i>	<i>ata-mi jəxə</i>
2SG	<i>bu-gə-i</i>	<i>ə-s’ə-i bu</i>	<i>jəxə-ǰə-i</i>	<i>ata-i jəxə</i>
3SG	<i>bu-gə-ø</i>	<i>ə-s’ə-ø bu</i>	<i>jəxə-ǰə-ø</i>	<i>ata-ø jəxə</i>
1PL.EXC	<i>bu-gə-u</i>	<i>ə-s’ə-u bu</i>	<i>jəxə-ǰə-u</i>	<i>ata-u jəxə</i>
1PL.INCL	<i>bu-gə-ti</i>	<i>ə-s’ə-ti bu</i>	<i>jəxə-ǰə-fi</i>	<i>ata-fi jəxə</i>
2PL	<i>bu-gə-u</i>	<i>ə-s’ə-u bu</i>	<i>jəxə-ǰə-u</i>	<i>ata-u jəxə</i>
3PL	<i>bu-du-gə</i>	<i>ə-s’ə-du bu</i>	<i>jəxə-du-ǰə</i>	<i>ata-du jəxə</i>

Figure 3-3. Negative structure in Udihe

ǂ-tense/mood-person/number	verb stem
NEG.AUX	

· positive sentence

- 3-8) *nuani* *ŋənə-i-ni*.
 (s)he go-PTCP.PRS-3SG
 ‘(S)he goes.’

· negative sentence

- 3-9) *nuani* *ə-i-ni* *ŋənə*.
 (s)he NEG-PTCP.PRS-3SG go
 ‘(S)he does not go.’

Table 3-3 shows that the verbal suffix *-du* belongs to the negative verb *ə-*, as do other person markers in a negative sentence. However, such negative constructions with the verbal suffix *-du* are not attested (c.f., example (3-10)). Even in Nikolaeva and Tolskaya (2001), the verbal suffix *-du* in negation is attached to the verb stem, as given in (3-11). Therefore, Table 3-3, concerning the morphological position of the verbal suffix *-du* in negative constructions, is inconsistent with actual usage.

3-10) *bii* *sitə-nə-mi* *o-lo* *ə-sə* ***əmə-du?***
 I child-ASS.PL-1SG this-LOC NEG-PST come-PL
 ‘Did my children come here?’

(Kazama 2004: 47)

3-11) *nuati* *əmnə=də* *namun-tigi* *ə-s’ə* ***xuli-du.***
 they once=CLT sea-DIR NEG-PST travel-PL
 ‘They have not traveled to the sea even once.’

(Nikolaeva and Tolskaya 2001: 214)

3.2.2.1.2. Kazama (2003a, 2007d, 2008e)

Kazama (2003a, 2007d, 2008e), on the other hand, describes the verbal suffix *-du* as an element used to denote plurality in a subject. He disagrees with Nikolaeva and Tolskaya (2001), arguing that its morphological slot does not correspond to that of general person markers, which always stand on the right edge of a verbal predicate structure. Kazama (2003a, 2007d, 2008e) insists that, judging from its position in negative constructions, the verbal suffix *-du* should be categorized as a derivational suffix rather than a person marker. With reference to examples (3-10), and (3-11) above, the author supports Kazama’s argument that the verbal suffix *-du* should be regarded as a derivational suffix. At the same time, Kazama (2007d, 2008e) claims that *-du* is strongly related to the direct evidential, as it appears mainly “in quotation(s), rhetorical expression(s), and expressions involving epistemic modality.”

3.2.2.2. Examination on the verbal suffix *-du*

As discussed in Kazama (2007d, 2008e), the verbal suffix *-du* in finite verb should be defined as a derivational element, as its position corresponds with that of general derivational suffixes in both positive and negative sentences. However, inconsistency in regarding the grammatical function of the verbal suffix *-du* has emerged from previous studies. Thus, this section reexamines the verbal suffix *-du* in the finite verb from the perspective of person and evidentiality to verify the findings of previous studies⁶. I confine the discussion to the following three points:

⁶ The main focus of this study is on third person marking on finite indicative endings in Tungusic and neighboring languages, but the examination of the verbal suffix *-du* is carried out within the boundary of

- (i) The analysis deals with the verbal suffix *-du* in finite verb categories as follows: (a) indicative (PST: *V-du-ø* or *V-du-gə*, (NEG: *ə-sə V-du* ‘NEG-PST V-PL’), FUT: *V-du-ʃA* (NEG: *ata V-du* ‘NEG.FUT V-PL’)); (b) subjunctive: *V-du-musə*; and (c) optative: *V-du-tA=ʃA*.
- (ii) The following examples are excluded from the analysis due to doubts regarding their grammaticality: *bi-sə-du-gə* (be-PST-PL-PST) in Kazama (2006a: 144); *ʃawa-gi-ga-du* (take-REP-PST-PL) in Kazama (2009a: 109); and *tausi-du-ʃə-ti* (cure-PL-FUT-3PL) in Kazama (2009a: 154).
- (iii) Certain example sentences that include other person endings are also excluded as they do not belong to the finite verb category. These are: *xuktə-du-isi-ti* (handle-PL-COND.CVB-3PL) in Kazama (2004: 63); *bagdi-du-a-ti* (live-PL-PTCP.PST-3PL) in Kazama (2004: 379); and *bi-du-ə-ti* (be-PL-PTCP.PST-3PL) in Kazama (2008a: 145).

3.2.2.2.1. Distinction between finite and participle verbs

Prior to the examination of the suffix *-du*, consideration of the differences between the two verbal forms (finite and participle verbs) in Udihe is necessary to specify the function of finite verb endings. The distinction between Udihe finite and participle verbs can be made based on syntactic and evidential functions. As shown in Table 3-4, the finite verb serves only as a sentence predicate (3-12), whereas the participle, also termed a “verbal noun” in some literature, has various syntactic functions (nominal (3-13), adnominal (3-14) and predicate (3-15)).

Table 3-4. Contrast in syntactic function of finite and participle verbs

	nominal	adnominal	predicate
finite verb	-	-	+
participle verb	+	+	+

• finite verb

predicate

- 3-12) *Misha Dunkaj tigr uisi-ə-mə-ni təlunsi-ʃə-mi.*
Misha Dunkaj tiger save-PTCP.PST-ACC-3SG tell.a.story-FUT-1SG
‘I will tell a story that a tiger saved Misha Dunkaj.’

(Kazama 2010a: 82)

the entire finite verb (indicative, subjunctive, and optative) in order to clearly identify the grammatical function of the relevant element.

· participle verb

nominal

- 3-13) *nəŋu-mi* *onjo-o-mo-ni* *taŋi-a-ni*.
 younger.brother-REF.SG write-PTCP.PST-ACC-3SG read-PTCP.PST-3SG
 ‘[He] read what his younger brother wrote.’

(Kazama 2010a: 222)

adnominal

- 3-14) *diəli-i* *mui-wə* *tugbu-jə*.
 fly-PTCP.PRS horse-ACC drop-IMP.2SG
 ‘Drop the flying horse.’

(Kazama 2010a: 221)

predicate

- 3-15) *moo-wo* *ŋawa-asi*, *čingə-ə-ni*.
 tree-ACC take-ANT.CVB hit-PTCP.PST-3SG
 ‘(He) took a wooden stick and hit (sth.) with it.’

(Kazama 2010a: 225)

As for the evidential distinction, Shnejder’s (1936) concise grammar of the northern Xor dialect of Udihe claims that the finite past is used to express a witnessed event, whereas the participle past functions as a hearsay form, as in (3-16):

Xor dialect

· finite past: direct evidentiality

- 3-16) *nua* *bu-gə-ə*.
 (s)he give-PST-3
 ‘(S)he gave (for sure).’

· participle past: hearsay

- nua* *bu-hə-ni*.
 (s)he give-PTCP.PST-3SG
 ‘(S)he (is said to) have given.’

(Malchukov 2000: 453)

Nevertheless, referring to the study concerning Bikin Udihe by Girfanova (1988), Malchukov (2000: 453) states that the participle past is neutral in the evidential, whereas only the finite past is evidentially marked, as the participle past is used to express both witnessed and non-witnessed cases. Girfanova’s (2002: 30-31) grammatical description of the Bikin dialect states that the finite past is used when the speaker either witnessed the events or had confidence in the source of information. Thus, as shown in Table 3-5,

the relation between verb forms and evidentiality in Udihe is defined as follows: the finite past is used to denote witnessed events or affirmative meaning⁷, whereas the participle form is evidentially neutral.

Table 3-5. Contrast between finite and participle verbs in evidential function (past tense)

	direct evidential (witnessed event or affirmative meaning)	indirect evidential (hearsay)	evidentially- marked
finite verb	+	-	+
participle verb	+	+	-

In this study, the examinations of the verbal suffix *-du*, specifically from the perspectives of person (3.2.2.2.2) and evidentiality (3.2.2.2.3), will be carried out on the basis of the above syntactic and evidential distinctions between finite and participle verbs.

3.2.2.2.2. Relationship between the verbal suffix *-du* and person

In 3.2.2.2.2, I clarify the relationship between the verbal suffix *-du* and person in the finite verb by analyzing Udihe textual materials and elicitation data. To this end, two Udihe texts (Text A and Text B), from two different consultants, are analyzed below.

Texts

As shown in Tables 3-6 and 3-7, the verbal suffix *-du* in the finite verb proves to be dominant in third person plural subject forms.

Table 3-6. Verbal suffix *-du* and person in Text A (Kazama 2004, 2006a, 2007a, 2008a, 2009a, 2010a)

	1PL.EXC	1PL.INCL	2PL	3PL	total
total	2 (?)			261	263
percentage	1%			99%	

⁷ There is a possibility that evidential functions in Udihe occur in all the finite tense categories. However, the suggestions of previous studies are followed here, admitting only the finite past as evidentially marked form.

Table 3-7. Verbal suffix *-du* and person in Text B (Kanchuga and Tsumagari 2002, 2010)

	1PL.EXC	1PL.INCL	2PL	3PL	total
total				35	35
percentage				100%	

There are two examples of the verbal suffix *-du* in first person plural forms, as indicated in (3-17) and (3-18).

- 3-17) *maala dægəmunə-ni=də*
dried.fish drying.place-3SG=CLT
xaisi xonto-ji woo-du-mu, mutə-ə.
further other-INS make.PST-PL-1PL.EXC finish-PST
‘We finished making a drying place for dried fish with other material.’

(Kazama 2008a: 94)

- 3-18) *uta-wa təluŋu-du, buu omo.*
that-ACC narrate.PST?-PL we.EXC one
‘We narrated that, one story.’

(Kazama 2008a: 169)

However, the author regards the grammaticality of examples (3-17) and (3-18) as doubtful for a number of reasons. Having verified (3-17) with the audio material attached to Kazama (2008a), I believe that the transcription should read *woodu mutəə* rather than *woodumu mutə*. In addition, it is ungrammatical insofar as *woodumu* and *mutə* do not agree in person and number, i.e., the subject in *woodumu* is first person plural but *mutəə* is a third person singular or plural subject. With regard to example (3-18), given that person endings for a finite verb cannot be omitted, the person marker *-u* should be used for the first plural subject, but no such element exists in the sentence. Therefore, the grammaticality of these two examples of the verbal suffix *-du* in the first person plural is dubious.

Elicitation

Following elicitation from my consultant Kanchuga in 2012, the verbal suffix *-du* is reconfirmed to appear only in the third person plural, and is not used for other persons (c.f., (3-19)-(3-23)). Furthermore, the suffix *-du*, as given in examples (3-22) and (3-23), is considered an optional element.

· finite past

- 3-19) **buu* *uta-wa* ***diga-du-gə-u***.
we.EXC that-ACC eat-PL-PST-1PL.EXC
‘We ate that.’

- 3-20) **minti* *uta-wa* ***diga-du-gə-fi (ti)***.
we.INCL that-ACC eat-PL-PST-1PL.INCL
‘We ate that.’

· finite future

- 3-21) **suu* ***ɣənə-du-ǰə-u***.
2PL.NOM go-PL-FUT-2PL
‘You will go.’

- 3-22) *nuati* ***ɣənə-(du)-ǰə***.
they go-PL-FUT
‘They will go.’

· finite subjunctive

- 3-23) *nuati* ***ɣənə-(du)-musə***.
they go-PL-SUBJ
‘They should have gone.’

3.2.2.2.3. Relationship between the verbal suffix *-du* and evidentiality

This section focuses on the relationship between the verbal suffix *-du* and evidentiality. Table 3-8 illustrates the appearance of the verbal suffix *-du* in the Udihe texts above.

Table 3-8. Appearance of the verbal suffix *-du* in finite verbs (Based on Nikolaeva and Tolskaya (2001), Kazama (2007d, 2008e), Udihe Text (A and B))

	finite verb forms			
	PST	FUT	SUBJ	OPT
	<i>V-du, V-du-gə</i>	<i>V-du-ǰA</i>	<i>V-du-musə</i>	<i>V-du-tA=ǰA</i>
result	+	+	+	+

It is clear that the suffix *-du* is used in all finite verb categories (indicative, subjunctive, and optative). Therefore, the author disagrees with Kazama (2007d, 2008e) that the verbal suffix *-du* is associated with direct evidentiality, as it appears not only in the evidentially-related tense (past) but also in other mood systems, such as optative and subjunctive. Nevertheless, as far as the finite past is concerned, the verbal suffix *-du* can function as a direct evidential marker (for witnessed events or affirmative meaning) in a third person plural subject. This is because the opposition of verb form between finite and participle verbs in the past (FINIT: $-A \sim -A' < *-kA$, PTCP: $-A < *-sA$) is vague as a result of phonological change. That is to say, the verbal suffix *-du* in the finite past can be used to convey either a witnessed event or affirmative meaning in the third person plural subject in order to make a clear distinction between the two verb categories⁸.

3.2.2.2.4. Grammatical function of the verbal suffix *-du*

Table 3-9 shows the paradigm of finite verbs in third person. As previously discussed, there is no distinctive person marker for third person in Udihe finite verbs, which signifies that there is no opposition between third person singular and plural. With the optional use of the verbal suffix *-du*, third person plural can be clearly marked in finite verb forms, as in examples (3-24)-(3-28). In sum, the verbal suffix *-du* is considered to optionally mark the third person plural in finite verb forms, even though its position differs from that of general person endings.

⁸ This view concerning the evidential function of the verbal suffix *-du* in the third person plural subject, within the finite past, is different from that in Baek (2013 and 2014a). Still, its main grammatical function is undoubtedly to mark the third person plural subject in finite indicative forms.

Table 3-9 Third person markers in Udihe finite verbs⁹

	PRS (-ø-)	PST (-A'-)	FUT (-jA-)	OPT (-tA=jA)	SUBJ (-musə-)
3SG	*V-ø-ø → PTCP	V-A'-ø	V-jA-ø	V-tA-ø=jA	V-musə-ø
3PL	*V-ø-ø → PTCP	V-A'-ø	V-jA-ø	V-tA-ø=jA	V-musə-ø
		=	=	=	=
		V-du-ø V-du-gə-ø	V-du-jA-ø	V-du-tA-ø=jA	V-du-musə-ø

· finite past tense

- 3-24) *kaŋa jəu ui-lə-ni tapči nii əmə-du.*
ondol what upper-LOC-3SG tightly person come.PST-PL
‘On the ondol (floor heating system), a pack of people came in.’

(Kazama 2004 : 444)

- 3-25) *jubə songo əmə-du-gə əi=tənə.*
two bear come-PL-PST this=CLT
‘Two bears came this time.’

(Kazama 2004 : 70)

· finite future tense

- 3-26) *sii sitə-wə-i=kə waa-du-ja.*
2SG.NOM child-ACC-2SG=CLT kill-PL-FUT
‘[They] will kill your child.’

(Kazama 2004 : 76)

· finite optative mood

- 3-27) *waa-mi, əmə-gi-du-tə=jə.*
kill-SIM.CVB come-REP-PL-OPT=CLT
‘If [they] hunt, let them return.’

(Kanchuga and Tsumagari 2002: 97)

⁹ According to Nikolaeva and Tolskaya (2001: 216), the verbal suffix *-du* within the vowel final verb stem in the finite past can be realized in two ways dependent on the final vowel of the preceding verb stem. Firstly, the suffix *-du*, following a verb that ends with *-a/-ə/-o*, is shown as *V-du*. Secondly, the same form after a verb stem that ends in the vowels *-i*, or *-u* is presented as *V-du-gə*. However, there are some exceptions in the Udihe texts, as shown in (3-24) and (3-25). Further investigation is required to resolve this issue.

· finite subjunctive mood

3-28) *nii-ǰigə=də* *kuti-ǰigə=də* *lali-mi,* ***budə-gi-du-məsə.***

person-PL=CLT tiger-PL=CLT starve-SIM.CVB die-REP-PL-SUBJ

‘Even people and tigers should have starved to death.’

(Kanchuga and Tsumagari 2002: 47)

3.2.3. Summary

In order to precisely classify third person marking on finite indicative forms in Udihe, the grammatical function of the verbal suffix *-du* in finite verbs was reanalyzed on the basis of Udihe texts and elicited data. In a nutshell, the Udihe verbal derivational suffix *-du* proved to work optionally as a third person plural marker in a finite verb form. With regard to evidentiality, the verbal suffix *-du* is basically considered to have nothing to do with direct evidentiality, as it is used not only in evidentially-related tense (finite past tense) but also in other unrelated mood systems. However, it should be stressed that the verbal suffix *-du*, within the finite past tense, may have a dual function as both witnessed or affirmative evidential and third person plural marker, which is attributed to vague distinction between the finite and participle verb forms in the past tense. Thus, third person marking on finite indicative forms in Udihe is regarded as making it an optionally distinct type of language in terms of third person number distinction.

3.3. Tungusic

In § 3.3, finite indicative endings in Tungusic are clarified, and I then investigate third person marking on finite indicative forms across the Tungusic languages with the same typological parameter (i.e., obligatorily distinct, optionally distinct, non-distinct, and non-person marking types) for third person marking.

3.3.1. Finite indicative forms in Tungusic

Prior to the main discussion, an overview of finite indicative endings in Tungusic is needed. As stated below, Ikegami (2001 (1983)) comments that Tungusic indicative endings can be divided into two categories, namely Class I and Class II, according to types of attached person markers. Ikegami adds that Class I forms are used as verbal nouns (so-called “participles”). Class II (finite indicative) forms, in contrast to participle

verbs syntactically multi-functioning as nominal, adnominal, and predicate, function only as sentence final verbs.

The indicative endings may be grouped into two classes, I (=participle verb) or II (=finite verb) according to whether an indicative ending is accompanied by a personal ending of either Set 1 or 2. ... Class I verb endings also serve in the formation of verbal nouns.

(Ikegami 2001 (1983): 370)

Table 3-10. Finite indicative forms in Tungusic¹⁰ (Based on Ikegami (2001 (1983)), Tsumagari (2002), Li (2006), and Kubo et al. (2011))

		PRS	PST	FUT
N. T.	Ek (I)	-rA or -∅	-rA or -∅	-jA(rA)
	E (I)	-r(A)	-r(A)	-jĩ(r)
E. T.	N (I)	-ja or -∅	-ja or -∅	PTCP
	Ol (III)	-rA or -∅	PTCP	-(r)ilA
	Nn (III)	-rA or -∅	-kA	-jaa(n)+(rA)
	Oc (II) ¹¹		PTCP	
	Ut (III)	-rA	-tA	-rilA
	U (II)	-dA or -∅	-kA	-jA
	S (I)	-rA or -∅	PTCP	-rA or -∅
S. T.	Hz (II)	-rA or -∅	PTCP	-rA or -∅
	M (IV)	-mbi	-hAbi	-mbi
	Sb (IV)	-mi	-xəi	-mi

Following the classification of Tungusic indicative endings in Ikegami (2001 (1983)), Table 3-10 summarizes Tungusic finite indicative forms on the basis of geographical position. As far as Hezhen, Manchu, and Sibe are concerned, the categorizations are based on Li (2006), Tsumagari (2002), and Kubo et al. (2011),

¹⁰ In accordance with the definition of finite indicative forms in this study, subjunctive and optative endings are excluded from Table 3-10.

¹¹ Orochi, which retains only participle verbs, is not included in the discussion.

respectively¹². Note that finite indicative endings in North Tungusic (Evenki, Even) show opposition between non-future (-*rA*- or -*ø*-) and future (-*ǰA*-). It is further noteworthy that present and future finite indicatives are unified into non-past (or imperfective) in South Tungusic. With regard to Tungusic spoken near the Russian Far East, East Tungusic languages except Negidal generally maintain three tense systems (present (*-*rA*-), past (*-*kA*-), and future (*-*ǰA*- or *-*riA*-)) in sentence-final only verb forms, although some East Tungusic languages synchronically lost part of the tense category. Negidal, distributed north-most among East Tungusic, has only one category (-*ǰa*-~*ø*-), used to denote either present or past tense, which is partially similar to corresponding forms of North Tungusic. In this study, the focus is on third person marking on finite indicative forms in Table 3-10.

3.3.2. First group

As shown in Table 3-11, Evenki¹³, Even, and Negidal, in the northern region of Russia, but not Solon in the Chinese territory, mark third person singular with the person ending -*n* in opposition to the third person plural ending on finite indicative verbs. Examples are given in (3-29)-(3-36). Thus, these Tungusic languages are interpreted as obligatorily distinct type. In contrast, all third person in Solon is marked by -*n* in Solon, irrespective of number, as presented in (3-37) and (3-38). In summary, the first group of Tungusic in the Russian territory can be generally categorized as obligatorily distinct,

¹² The Sibe progressive indicative form -*maχəi* is excluded from the examination as there is no corresponding form in other Tungusic languages.

¹³ Note that Hu's (1986) short description of grammar concerning Oroqen Evenki inside the Chinese border reports that a distinction of number in third person, namely 3SG:-*n*, 3PL: -*ø*, is verified in this Tungusic language, as is the case in North Tungusic. However, Li (2005) claims that subject agreement in Oroqen has almost disappeared, according to linguistic data (i.e., 1SG: -*m* (or -*n*), non-1SG: -*n*) from consultants in their 40s and 50s, as shown below. On the basis of this recent study, the shift of third person marking from a clear distinction to non-distinction or non-person marking, similarly to Solon, is considered to have occurred in Oroqen.

· 3rd person singular

nənin ǰəktə-ǰə ǰəb-tə-n.

(s)he food-INDEF.ACC eat-IMPF-3

‘(S)he is eating food.’

· 3rd person plural

tari-l ǰəktə-ǰə ǰəb-tə-n.

that-PL food-INDEF.ACC eat-IMPF-3

‘They are eating food.’

Li (2005: 61)

whereas Solon on the Chinese side is a non-distinct language.

Table 3-11. Third person endings in the first group of Tungusic (Based on Poppe (1931), Koleskinova and Konstantinova (1968), Cincius (1982), Malchukov (1995), and Tsumagari (2009a))

	Ek	E	N	S
3SG	-n	-n	-n	-n
3PL	-∅	(-r)	-∅	-n

Evenki (I)

· 3rd person singular

- 3-29) *asa-tkan ĵu-du taga-t-čə-rə-n.*
 woman-DIM house-DAT sit.down-STAT-IMPF-N.FUT-3SG
 ‘The girl is sitting at home.’

(Nedjalkov, I. V. 1997: 248)

· 3rd person plural

- 3-30) *digin oron-duu ugu-ča-ĵa-ra-∅.*
 four deer-DAT ride-STAT-IMPF-N.FUT-3PL
 ‘[They] are riding on four reindeer.’

(Bulatova and grenoble 1999: 32)

Even (I)

· 3rd person singular

- 3-31) *kūŋa-w hōŋa-d-da-n.*
 child-1SG cry-PROG-N.FUT-3SG
 ‘My child is crying.’

(B. Pakendorf fielddata)

- 3-32) *əɾək əɾək niməər ənən-ni tiik ikəə-ĵi-n,*
 this this neighbor mother-3SG now sing-FUT-3SG
hūnaaq̃i boo-ĵi-n mut ömölġö-dü-t
 daughter.REF.SG give-FUT-3SG 1PL.GEN boy-DAT-1PL

‘Now the mother of this neighbor will sing, she will give her daughter to our boy.’

(B. Pakendorf fielddata)

· 3rd person plural

- 3-33) *tam kury kuruussal əčin kulajdəə-məč-ə-d-də-ø.*
there chicken chicken.PL like.this go.for.a.walk-REC-E-PROG-N.FUT-3PL
'Chickens are walking around there.'

(B. Pakendorf fielddata)

- 3-34) *ilə tala örön-düla hər-ji-r, örö-l-bür it-či-r.*
which.LOC that.LOC reindeer-LOC go-FUT-3PL reindeer-PL-REF.PL see-FUT-3PL
'They go to the place of reindeer and see them.'

(B. Pakendorf fielddata)

Negidal (I)

· 3rd person singular

- 3-35) *amɣa-dükka-n səəksə juu-ja-n.*
mouth-ABL-3SG blood come.out-N.FUT-3SG
'Blood comes out from his mouth.'

(Kazama 2002: 59)

· 3rd person plural

- 3-36) *juł asa-l baldi-ja-ø.*
two woman-PL live-N.FUT-3PL
'Two women live.'

(Pevnov and Khasanova 2003: 83)

Solon (I)

· 3rd person singular

- 3-37) *imanda imanda-ji-ra-n.*
snow snow-PROG-IMPF-3
'It is snowing.'

(Hu and Chaoke 1986: 63)

· 3rd person plural

- 3-38) *aba ənee juuri jaanji-maaši-ji-ra-n.*
father mother two speak-RECP-PROG-IMPF-3
'My father and mother speak with each other.'

(Hu and Chaoke 1986: 62)

3.3.3. Second group

As discussed in § 3.2, Udihe, taking $-\emptyset$ as third person singular and plural ending, optionally uses the verbal derivational suffix $-du$ to mark third person plural subjects in finite indicative forms, although its position is different from that of general person endings. Regarding Hezhen in the Chinese territories, Li (2006: 63) states that finite indicative ending exists only in third person, whereas first and second person are expressed by the participle verb form. As illustrated in Table 3-12 and examples (3-39) and (3-40), third person singular and plural are individually marked with the same person suffix $(-n)$. This signifies that Hezhen does not have number opposition in third person on finite indicative forms, as is the case in Solon. In short, Udihe is included as an optionally distinct language, whereas Hezhen is a non-distinct language. Note that I do not consider third person markers in Orochi, as it no longer retains the finite indicative category, which already switched to the participle with clear opposition between third person singular and plural.

Table 3-12. Third person endings in the second group of Tungusic (Based on Li (2006))

	U	Hz
3SG	$-\emptyset$	$(-n)$
3PL	$(-du-)$	$(-n)$

Hezhen (II)

· 3rd person singular

3-39) *niani tǎčkən ǝmǝ-rǝ-∅.*

(s)he really come-N.PST-3

‘(S)he really comes.’

(Li 2006: 143)

· 3rd person plural

3-40) *ti nio gərən gurun ai-ǰi xǝsu-rǝ-∅.*

that person all people good-INS say-N.PST-3

‘All people say a good word for that person.’

(Li 2006: 143)

3.3.4. Third group

Table 3-13. Third person endings in the third group of Tungusic (Based on Sunik (1985), Kazama (2001, 2010b, 2010c), and Yamada (2013))

	Nn	Ol	Ut
3SG	-∅	-∅	-∅
3PL	(-l)	(-l)	(-l)

Ikegami (2001 (1983): 369-370) explains that there is no third person ending on finite indicative verbs in Nanay, Ulcha, and Uilta, apart from the plural element *-l* which marks third person plural (c.f. Table 3-13). In other words, the third group of Tungusic commonly uses the same form of the nominal plural suffix *-l* to encode third person plural subject on finite indicative forms. Previous studies (Sunik 1985, Kazama 2010c, and Yamada 2013) have remarked that the plural suffix *-l* for third person plural in Ulcha and Uilta is not an obligatory element, as attested in (3-42), (3-44), and (3-45). Concerning Nanay, no clear description appears on whether or not the use of the nominal element *-l* is optional. Examples (3-46)-(3-50) are from Nanay texts. As illustrated in (3-47), the verbal predicate in the finite present remains zero-marked even in the third person plural subject, as for third person singular. The converbal ending *-mi* in the next sentence is realized as the plural converbal form *-mAAri* (<*-*mi* + *-*bAAri*- REF.PL) to convey a plural subject in the subordinate clause, whereas the main verb *bi-* remains as *-∅* without taking the nominal suffix *-l* for third person plural marking. As in example (3-48), however, agreement in number between the plural marking of the converb in *-mAAri* and the nominal plural suffix *-l* is attested in the same finite indicative category. In addition, the same subject conditional (3-49) indicates that the subject in the subordinate clause is considered as a third person plural from the reflexive plural suffix *-bari*, but the third person plural marker *-l* is not required for agreement in the main verb, in comparison with (3-50). This observation explains why the nominal plural suffix *-l* for third person plural subjects in Nanay is also regarded as an optional rather than obligatory element. Hence, the third group of Tungusic is classified as an optionally distinct type of language.

Ulcha (III)

· 3rd person singular

- 3-41) *tʰu nʃu tʰu bi-lə-ø=mə sagdan-dala=da.*
that man thus be-FUT-3=CLT grow.old-TERM.CVB=CLT
'That man will be like that until he grows old.'

(Kazama 2010c: 107)

· 3rd person plural

- 3-42) *ütʰili-i gur-sel ütilii-lə-ø=mə.*
be.able-PTCP.PRS person-PL be.able-FUT-3=CLT
'Able people will be able.'

(Kazama 2008c: 177)

Uilta (III)

· 3rd person singular

- 3-43) *dolboŋʃillaa-ø.*
get.dark+FUT-3
'It will get dark.'

(Ikegami 2002b: 116)

· 3rd person plural

- 3-44) *sumbeepə waa-rillaa-ø sugdæəkki nari-sal unʃi-ni.*
2PL.ACC kill-FUT-3 sloppy person-PL say.PRS-3SG
'He says: Sloppy people will kill you.'
- jə-du sumbeepə waa-rillaa-l.*
this-DAT 2PL.ACC come+FUT-PL
'They will kill you here.'

(Ikegami 2002b: 133)

- 3-45) *sinʃeellaa-l tari nari-sal.*
come+FUT-PL that person-PL
'Those persons will come.'

(Ikegami 2002b: 134)

Nanay (III)

· 3rd person singular

- 3-46) *orkin ʃaka o-ʃaraa-ø.*
bad thing become-FUT-3
'A bad thing will happen.'

(Kazama 2010b: 114)

· 3rd person plural

- 3-47) *juə mapə-kaan piktə-ni biə undə.*
two bear-DIM child-3SG be.PRS.3 say
kupiləə-ndu-məəri=ə biə undə.
play.around-DIST-SIM.CVB.PL=CLT be.PRS.3 say
‘They say that there are two small bears and they are playing around.’

(Kazama 2001: 52)

- 3-48) *təwəksə ojalani tooko-maari=o biə-l undə təi mapakaa-sal=gola.*
cloud upside climb-SIM.CVB.PL=CLT be.PRS-PL say that small.bear-PL=CLT
‘They say: Those small bears are climbing over the upside of the cloud.’

(Kazama 2001: 58)

- 3-49) *sii mimbə baogo-xam-ba-si saa-xam-bari osini,*
2SG.NOM I.ACC find-PTCP.PST-ACC-2SG know-PTCP.PST-REF.PL if
mimbə ji-dəə waa-ǰaraa-ø.
I.ACC come-ANT.CVB kill-FUT-3.
‘If they know that you found me, they will come and kill me.’

(Kazama 2010b: 137)

- 3-50) *əi-du xəm waa-go-ǰaa-l təi ŋəwəə-səl.*
this-DAT all kill-REP-FUT-PL that devil-PL
‘Those devils will kill all here.’

(Kazama 2010b: 146)

3.3.5. Fourth group

Manchu has no verbal person marking on finite indicative forms, as shown by (3-51) and (3-52). As in Manchu, the corresponding verbal predicate in Sibe is also not marked by a person element (cf. (3-53) and (3-54)). Thus, Manchu and Sibe are classified as non-person marking languages.

Manchu (IV)

· 1st person singular

- 3-51) *bi hərgən bə ara-mbi.*
I letter ACC write-IMPF
‘I write a letter.’

(Zaxarov 1879: 159)

· 3rd person singular

3-52) *i boo bə wəiə-mbi.*

(s)he house ACC build-IMPF

‘(S)he builds a house.’

(Zaxarov 1879: 159)

Sibe (IV)

· 1st person singular

3-53) *bi gulgulu uʃu nimə-mi.*

I always head ache-IMPF

‘I always have a headache.’

(Kubo et al. 2011: 82)

· 3rd person singular

3-54) *təɾə ʃiŋədu=čiʻ bədərə-mi.*

that Kyoto=DIR return-IMPF

‘(S)he returns to Kyoto.’

(Kubo et al. 2011: 38)

3.3.6. Summary

The above examination of third person marking on finite indicative forms in Tungusic languages has yielded the results summarized in Table 3-14. First, Evenki, Even, and Negidal, spread along the northern part of Russia, are generally confirmed to be obligatorily distinct languages, as third person singular marker *-n* is an obligatory element, in contrast with the third person plural ending. Second, East Tungusic languages (Ulcha, Nanay, Uilta, and Udihe), except Orochi (which has lost the finite indicative category), are all considered optionally distinct languages. Specifically, Nanay, Ulcha, and Uilta selectively use the nominal plural suffix *-l* to mark third person plural subjects, and Udihe employs the verbal derivational suffix *-du* for third person plural subjects¹⁴. Finally, South Tungusic, spoken on the Chinese side, is divided into

¹⁴ The author offers here a brief insight on why only Udihe among East Tungusic languages uniquely adopts the verbal derivational suffix to mark third person plural. As stated above, the suffix *-l*, optionally used to mark third person plural in East Tungusic languages, is considered a nominal plural element. However, Udihe has no corresponding plural element. It is presumed that Udihe lost the plural ending *-l* in the process of phonetic change, in line with Kazama’s (2010a: 193) description of the decline of the sonorants *-n*, *-l*, *-r* in syllable-final position in Orochi and Udihe. In summary, East Tungusic languages

two groups, namely (i) Solon and Hezhen, and (ii) Manchu and Sibe. In the former group of South Tungusic languages (Solon and Hezhen), there is no number distinction in third person, as the same person suffixes are used for both third person singular and plural. In contrast, the latter group of South Tungusic languages are of the non-person marking type, as their finite indicative forms take no person marker.

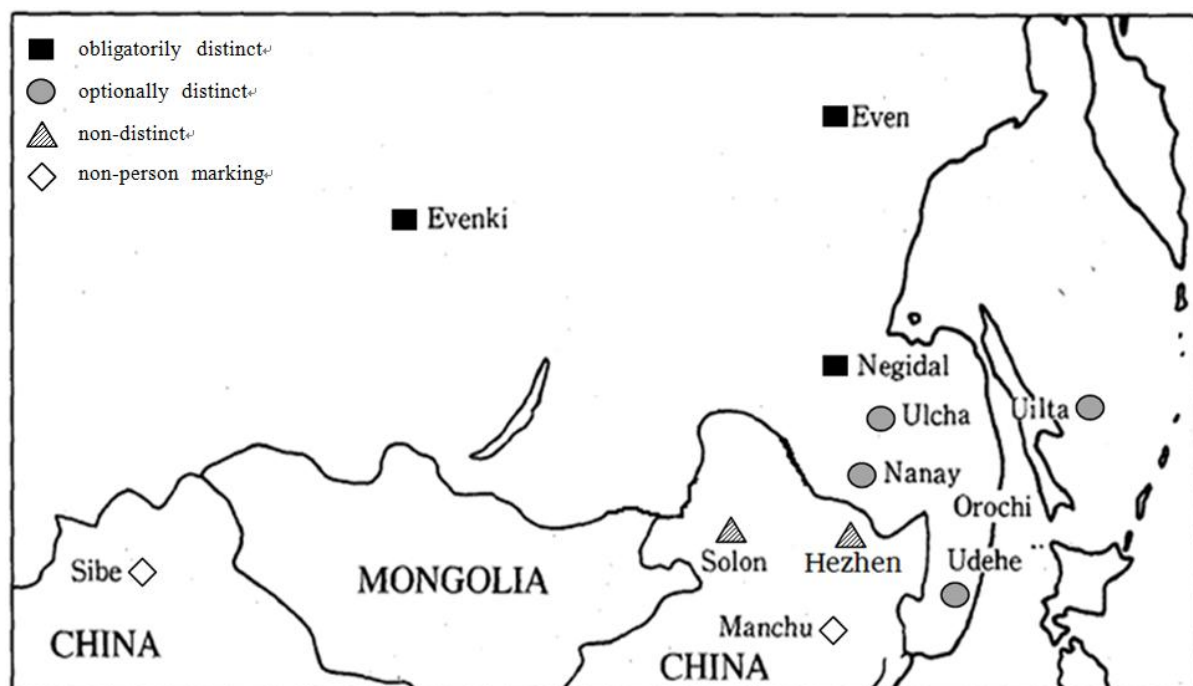
Table 3-14. Third person marking on finite indicative forms in Tungusic

	3SG	3PL	number distinction
Ek (I)	<i>-n</i>	<i>-ø</i>	obligatorily distinct
E (I)	<i>-n</i>	<i>(-r)</i>	obligatorily distinct
N (I)	<i>-n</i>	<i>-ø</i>	obligatorily distinct
Ol (III)	<i>-ø</i>	<i>(-l)</i>	optionally distinct
Nn (III)	<i>-ø</i>	<i>(-l)</i>	optionally distinct
Ut (III)	<i>-ø</i>	<i>(-l)</i>	optionally distinct
U (II)	<i>-ø</i>	<i>(-du)</i>	optionally distinct
S (I)	<i>-n</i>	<i>-n</i>	non-distinct
H _z (II)	<i>(-n)</i>	<i>(-n)</i>	non-distinct
M (IV)	non-person marking		
S _b (IV)	non-person marking		

In short, as illustrated in Map 3-1, third person marking on finite indicative forms in Tungusic can be organized on the basis of geographical distribution as follows: (i) North Tungusic (obligatorily distinct type), (ii) East Tungusic (optionally distinct type), and (iii) South Tungusic 1 (non-distinct type) and (iv) South Tungusic 2 (non-person marking type).

can indicate third person plural subjects with the nominal plural suffix *-l* in the finite verb. This is not the case in Udihe because it has no such element. I suppose that this is why the verbal derivational suffix *-du* in Udihe functions as a person marker for third person plural in finite verb forms.

Map 3-1. Distribution of Tungusic from the perspective of third person marking



3.4. Neighboring languages

In § 3.4, I examine third person markers on finite indicative forms in a number of languages (Kolima Yukaghir, Russian, Turkic (Sakha, Kazakh, and Uyghur), Mongolic (Buryat, Dagur, and Khalkha), and Chinese)) that are neighbors of Tungusic. Consider Maps 1-1 and 1-3 regarding the distribution of Tungusic and these adjacent languages.

3.4.1. Kolima Yukaghir and Russian

As (3-55) and (3-56) show, third person singular and plural on finite indicative forms in Kolima Yukaghir, which is in contact with North Tungusic, are clearly distinguished by different person endings. The verbal plural suffix *-ŋi* in Kolima Yukaghir is an obligatory element for third person plural marking. As shown in (3-57) and (3-58), Russian, which has been in contact with North Tungusic for a relatively longer time than East Tungusic, also has a clear distinction between third person singular and plural, using distinctive person endings on finite indicative verbs. As far as the finite past is concerned, there is no person distinction, but it is noteworthy that

number opposition remains. In short, third person marking on finite indicative forms in Kolima Yukaghir and Russian are considered to be the obligatorily distinct type.

Table 3-15. Third person endings on finite indicative forms in Kolima Yukaghir (Based on Maslova (2003: 140))

	transitive		intransitive	
	N.FUT	FUT	N.FUT	FUT
3SG	<i>juø-m</i>	<i>juø-te-m</i>	<i>šohie-j</i>	<i>šohie-te-j</i>
3PL	<i>juø-ηaa</i>	<i>juø-ηi-te-m</i>	<i>šohie-ηi</i>	<i>šohie-ηi-te-j</i>

Kolima Yukaghir

· 3rd person singular

- 3-55) *tintaŋ terike čaj-le oože-š-u-m.*
 that old.woman tea-INS drink-CAUS-E-TR.3SG
 ‘That old woman gave [him] some tea.’

(Maslova 2003: 247)

· 3rd person plural

- 3-56) *ajii-nu-t taa meemee-le kudede-ηaa n’elbet-ηaa.*
 shoot-IMPF-IMPF.CVB there bear-INS kill.PFV-TR.3PL skin-TR.PL
 ‘They shot and killed a bear. [They] skinned [it].’

(Maslova 2003: 142)

Russian

· 3rd person singular

- 3-57) *kto obeda-et v restorane?*
 who have.lunch-PRS.3SG at restaurant
 ‘Who is having a lunch at restaurant?’

(Shirota 2010: 81)

· 3rd person plural

- 3-58) *oni vseгда obeda-yut vmeste.*
 they always have.lunch-PRS.3PL together
 ‘They always have a lunch together.’

(Shirota 2010: 81)

3.4.2. Turkic (Sakha, Kazakh, Uyghur)

In 3.4.2, the focus is on third person marking on finite indicative endings in the Turkic languages Sakha, Kazakh, and Uyghur. Turkish will also be briefly mentioned.

Table 3-16. Third person endings on finite indicative forms in Turkic¹⁵ (Based on Geng and Li (1985), Zhao and Zhu (1985), Takeuchi (1991), Stachowski and Menz (1997), and Nakashima (2013))

	Sakha			Kazakh		Uyghur	
	PRS	PST	FUT	N.PST	PST	N.PST	PST
3SG	-Ar	-tA	-iAɣ-A ~ -iA	-dɪ	-∅	-i/ydu	-∅
3PL	-Al-lAr	-tɪlAr	-iAx-tArA	-dɪ	-∅	-i/ydu	-∅

As presented in Table 3-16 and examples (3-59) and (3-60), the distinction between third person singular and plural is always clearly-encoded in Sakha, spoken in northern Siberia. Note that the nominal plural suffix **-lAr* for third person plural in Sakha is an obligatory element. This is inconsistent with the optional use of **-lAr* for third person plural marking in Turkish (cf. 3-5). In contrast, Kazakh¹⁶ and Uyghur, distributed inside the Chinese border, lack number opposition in the third person, with both singular and plural marked by same form, as illustrated in Table 3-16 and examples (3-61), (3-62), (3-64), and (3-65). Nakashima (2013: 69) mentions that, in Kazakh, there is no demand for plural marking to indicate the third person plural in verbal person marking, and this is considered to be parallel to that of nominal person marking. This is applicable to Uyghur as well. It is remarkable that **-lAr*, used either mandatorily or optionally in Sakha and Turkish to indicate third person plural, is attached to finite indicative forms in second person plural subjects (cf. (3-63)). In sum, Sakha in the northern Siberian region is classified as obligatorily distinct, whereas Kazakh and Uyghur in the southern region are non-distinct type languages. It should be noted that Turkish, selectively marking

¹⁵ The reciprocal suffixes (K:-(I)s, Ug: -(i)š~-(U)š) in Kazakh and Uyghur can be recognized as third person plural marker in view of the whole person agreement system on finite indicative forms but it is not admitted here as a 3PL marker as it can be used in other plural subjects as well.

¹⁶ Note that this study focuses mainly on Kazakh, which is spoken in the Xinjiang Uyghur autonomous province in the Chinese territory. However, as far as third person marking on finite indicative forms is concerned, the Kazakh language in the Kazakh state also retains the same feature.

third person plural with the nominal marker *-lAr*, is an optionally-distinct language. Judging from these results, the number distinctions in third person marking on finite indicative verbs in Turkic can be attributed to geographical position as well.

Sakha

· 3rd person singular

- 3-59) *kenčeerī bujjuł sajułlug-ar taxsuu-bat-u-ttan.*
 Kenceeri this.year summer.house-3SG.DAT go.out-PTCP.NEG.PRS-3SG-ABL
munčaar-ar.
 disappoint-PRS.3SG
 ‘Kencheri get disappointed in not going out to summer house this year.’

(Ebata 2013: 14)

· 3rd person plural

- 3-60) *saŋa tutuu-nu söbülee-bekke moskuba-ra üñs-el-ler.*
 new building-ACC like-NEG.ANT.CVB Moscow-DAT complain-PRS-3PL
 ‘Not liking new building, they complain to Moscow.’

(Ebata 2013: 16)

Kazakh

· 3rd person singular

- 3-61) *kün bat-tı-ø.*
 sun set-PST-3
 ‘The Sun set.’

(Geng and Li 1985: 66)

· 3rd person plural

- 3-62) *ǰoldas-tar šöp šap-qalı ket-tı-ø.*
 comrade-PL grass cut-PURP.CVB go-PST-3
 ‘Comrades went to cut grass.’

(Geng and Li 1985: 81)

· 2nd person plural

- 3-63) *sender qašan qajıt-ıp kel-di-ñder?*
 you.PL.NOM when return-ANT.CVB come-PST-2PL
 ‘When did you come back?.’

(Geng and Li 1985: 169-170)

Uyghur

· 3rd person singular

3-64) *bu bala mäktäp-tä 'oqu-j-du.*
this child school-LOC study-N.PST-3
'This child studies at school.'

(Takeuchi 1991: 163)

· 3rd person plural

3-65) *balilar qora-da 'ojna-p jür-i-du.*
child.PL garden-LOC play-ANT.CVB walk-N.PST-3
'Children are playing in the garden.'

(Takeuchi 1991: 309)

3.4.3. Mongolic (Buryat, Dagur, Khalkha)¹⁷

In 3.4.3, third person marking on finite indicative forms in Buryat, Dagur, and Khalkha are examined. Buryat is mainly distributed in the Buryat district inside the Russian border, whereas Dagur is a Mongolic language spoken on the northern Chinese side located close to Buryat. Moreover, Khalkha Mongolian is the official language of Mongolia. As illustrated in Table 3-17 and examples (3-66)-(3-67), Kuribayashi (1992) and Skribnik (2003) mention that the nominal plural suffix *-d* in Buryat, spoken on the Russian side, is optionally used as a third person plural marker on finite indicative endings¹⁸. With regard to Dagur, Tsumagari (2003: 148) comments that the nominal plural suffix *-sul*¹⁹ is employed to encode the third person plural subject in verbal predicate structures but does not indicate whether or not the *-sul* is an obligatory element. However, judging from examples like (3-68) and (3-69), which exclude any distinctive person endings for third person singular and plural, as in other descriptive grammars of Dagur (Zhong (1982), Todaeva (1986), and Sung et al. (2010)), the *-sul* is highly likely

¹⁷ In Mongolic (e.g., Buryat and Dagur), certain person endings are added to the verbal predicate structure regardless of verb type (finite and participle).

¹⁸ In contrast, Yamakoshi (2011) states that there is no number distinction for third person on finite indicative forms in Sinekhen Buryat, a sub-dialect of Buryat in the Chinese territories. Within Buryat, therefore, a difference in third person marking according to geographical region is also considered to occur.

¹⁹ The suffix *-sul* is possibly obtained by the influence of Tungusic, as its form is similar to the nominal suffix *-sAl* in Tungusic compared to the nominal element **-d* in Mongolic.

to be an optional element for a third person plural subject. Finally, in Khalkha Mongolian, no person ending is attached to verbal predicate structures (cf. (3-70), (3-71)). In a nutshell, both Buryat and Dagur, in which a nominal plural element can be employed to convey third person plural, are classified as optionally distinct. Khalkha, in turn, is a non-person marking type language.

Table 3-17. Third person endings on finite indicative forms in Mongolic²⁰ (Based on Kuribayashi (1992), Skribnik (2003), Zhong (1982), Todaeva (1986), Tsumagari (2003), and Sung et al. (2010))

	Buryat	Dagur	Khalkha
3SG	-∅	-∅	-
3PL	(-d)	(-sul)	-

Buryat

· 3rd person singular

3-66) *tere xün nege yuume beše-ne.*

that man one thing write-N.PST

‘(S)he (=that man) writes something.’

(fielddata)

· 3rd person plural

3-67) *tede nege yuume beše-ne-(d).*

that.PL one thing write-N.PST-PL

‘They write something.’

(fielddata)

Dagur

· 3rd person singular

3-68) *tərə xu ir-ijə-bəj-∅.*

that man come-PROG-IMPF-3

‘That man is coming.’

(Sung et al. 2010: 67)

²⁰ As for Khamnigan Mongol, which is used in the areas between those where Buryat and Dagur are spoken, Janhunen (2003) reports that the nominal plural element *-d* works selectively as a third person plural marker in the durative of the finite indicative form.

· 3rd person plural

- 3-69) *əd jaw-ǰǰ-bǰ-ø.*
that.PL go-PROG-IMPF-3
‘They are going.’

(Sung et al. 2010: 67)

Khalkha

· 1st person singular

- 3-70) *bi öñöödör japon ruu jaw-na.*
I today Japan DIR go-N.PST
‘Today, I go to Japan.’

(Yamakoshi 2012: 89)

· 3rd person singular

- 3-71) *oyuutny naadam margaaš exel-ne.*
student.GEN festival tomorrow begin-N.PST
‘The student’s festival begins tomorrow.’

(Yamakoshi 2012: 90)

3.4.4. Chinese

As (3-72) and (3-73) illustrate, Chinese encodes no person marking in verbal predicates, and so is a non-person marking type of language.

· 1st person singular

- 3-72) *wǒ qí hēi mǎ.*
I ride black horse
‘I ride a black horse.’

(Sun 2006: 149)

· 3rd person singular

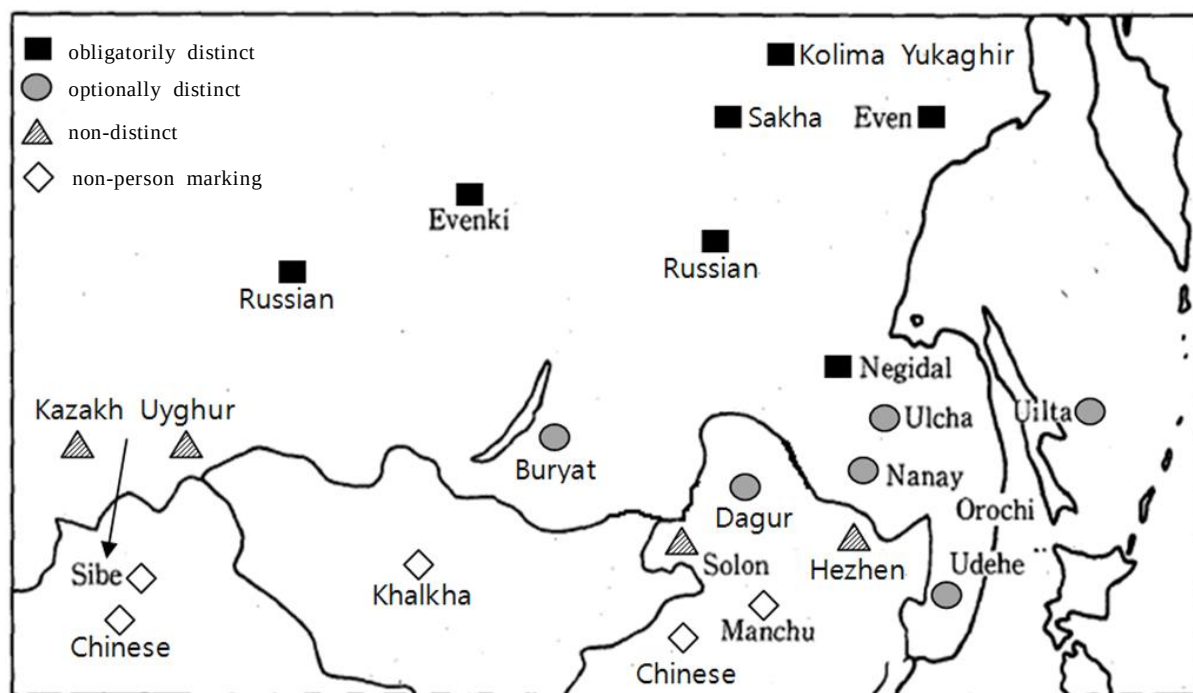
- 3-73) *dìdì qí bái mǎ.*
younger.brother ride white horse
‘My younger brother rides a white horse.’

(Sun 2006: 149)

3.5. Conclusion

The differences in third person marking on finite indicative forms in Tungusic and adjacent languages have been discussed in terms of number distinction for third person. As is clear from Map 3-2, the distinct patterns of third person marking in Tungusic and contiguous languages correlate with their geographical distribution.

Map 3-2. Third person marking on finite indicative forms in Tungusic and neighboring languages



First, Evenki, Even and Negidal in the northern Russian region are classified as obligatorily distinct type, as the distinction between third person singular and plural is always clearly retained; this is paralleled in Kolima Yukaghir, Russian, and Sakha. Second, East Tungusic languages (Ulcha, Nanay, Uilta, and Udihe) are equivalent to neighboring Mongolic (Buryat and Dagur) in that all are optionally distinct type languages. Moreover, East Tungusic languages, except Udihe, also coincide with these Mongolic languages in that third person plural can be marked by the nominal plural suffix. As far as Udihe is concerned, the verbal derivational suffix *-du* is used selectively to indicate third person plural, which is speculated to originate from the loss of the nominal element *-l* as a result of phonological change. Regarding South Tungusic, Solon and Hezhen correspond with Kazakh and Uyghur, notwithstanding the lack of direct contact between the two groups, in that number distinction for third person is not

grammatically encoded. It is noticeable that the two groups of languages are identically distributed in the Chinese territory. The rest of South Tungusic (Manchu and Sibe) are regarded as non-person marking type languages, which correspond to Chinese and Khalkha Mongolian. In conclusion, Tungusic shows different patterns of third person marking on finite indicative forms depending on geographical position and these areal-based variations among Tungusic are presumed to be attributed to influence from neighboring languages.

*Chapter IV Converb ending *-mi*

Chapter IV

Converbal ending *-mi²¹

Haspelmath (1995) defines “converb” as “a nonfinite verb form whose main function is to mark adverbial subordination.” The converb is widely observed in the Altaic type of language (Tungusic, Mongolic, Turkic, Korean, and Japanese) in order to connect more than two events as adverbial constructions (e.g., temporal, causal, purposive, conditional, and concessive etc.). The converb in Udihe, as shown in (4-1), syntactically and semantically corresponds to gerund (4-2) in English.

· converb (Udihe)

- 4-1) *xoto-tigi ʎənə-əsi, kniga-wa gada-a-ni.*
town-DIR go-ANT.CVB book-ACC buy-PTCP.PST-3SG
‘Going to a town, (s)he bought a book.’

· gerund (English)

- 4-2) **Going** to a town, (s)he bought a book.

The aim of Chapter IV is to clarify the functional differences of the converbal form *-mi in Tungusic from the approach of areal linguistics. This study is composed of five parts as follows: § 4.1 introduces previous works on the descriptions and functional distinctions of converb in *-mi among Tungusic. In § 4.2, I give an outline of typological parameters of converbs, divided by two factors: (i) morpho-syntactic, including person marking, number marking, switch-reference, auxiliary verb structure, and grammaticalization of speech verbs; and (ii) semantic, including simultaneity, anteriority, causality, purposive, and conditional. § 4.3 and § 4.4 respectively apply the above-mentioned morpho-syntactic and semantic standards of converb not only to the *-mi in the Tungusic languages but also to semantically-corresponding imperfective converbal suffixes in the neighboring languages. § 4.5 summarizes the main points in this chapter.

²¹ This is a revised and extended English version of Baek (2014b, 2015), which were presented at the first Conference on Central Asian Languages and Linguistics at Indiana Univ. (U.S., 2014.5.16).

4.1. Previous Studies

The converbal ending **-mi* shares common forms and similar semantic functions in all Tungusic languages. Therefore, the Tungusic **-mi* is generally considered a converbal form that stems from the Proto-Tungusic.

Table 4-1. Descriptions of converbal endings **-mi* and **-rAk-* in previous literature

Ek (I)	<i>-mi</i> [temporal-conditional CVB (Konstantinova 1968), conditional CVB (Nedjalkov, I. V. 1997, Bulatova and Grenoble 1999)]	<i>-rAki-PERS</i> [temporal-conditional CVB (Konstantinova 1968), conditional CVB (Nedjalkov, I. V. 1997, Bulatova and Grenoble 1999)]
E (I)	<i>-mi</i> [temporal-conditional CVB (Novikova 1968), conditional CVB (Malchukov 1995)]	<i>-rAk-PERS</i> [temporal-conditional CVB (Novikova 1968), conditional CVB (Malchukov 1995)]
N (I)	<i>-mi</i> [temporal-conditional CVB (Kolesnikova and Konstantinova 1968), conditional CVB (Cincius 1982, Kazama 2002)]	<i>-jik-PERS</i> [temporal-conditional CVB (Kolesnikova and Konstantinova 1968), conditional CVB (Cincius 1982, Kazama 2002)]
S (I)	<i>-mi</i> [imperfective CVB (Poppe 1931), coordinative CVB (Chaoke et al. 1991, Tsumagari 2009a)]	<i>-kki-PERS</i> [conditional CVB (Chaoke et al. 1991, Tsumagari 2009a)]
U (II)	<i>-mi</i> [present-tense CVB (Shnejder 1936), infinitive (Nikolaeva and Tolskaya 2001), simultaneous CVB (Kazama 2010a)]	none
Oc (II)	<i>-mi</i> [simultaneous CVB (Avrorin and Boldyrev 2001)]	<i>-(A)ki-PERS</i> [temporal-conditional CVB (Avrorin and Boldyrev 2001)]
Hz (II)	<i>-mi</i> [coordinative CVB (An 1986, Li 2006), simultaneous CVB (Tamura 2008)]	<i>-ki-PERS</i> [conditional CVB (An 1986, Li 2006, Tamura 2008)]
Nn (III)	<i>-mi</i> [simultaneous CVB (Avrorin 1961, Kazama 2010b)]	none
OI (III)	<i>-mi</i> [simultaneous CVB (Sunik 1985, Kazama 2010c)]	none
Ut (III)	<i>-mi</i> [simultaneous CVB (Petrova 1967), temporal-conditional CVB (Ikegami 2001 (1959)), coordinative CVB (Tsumagari 2009b)]	<i>-rai-PERS</i> [temporal-conditional CVB (Petrova 1967, Ikegami 2001 (1959)), conditional CVB (Tsumagari 2009b)]
M (IV)	<i>-mə</i> [present-tense CVB (Zaxarov 1879), imperfective CVB (Sung 1968, Li 2000, Gorelova 2002), simultaneous CVB (Avrorin 2000), infinitive (Tsumagari 2002)]	<i>-čī</i> [conditional CVB (Zaxarov 1879, Li 2000, Gorelova 2002, Avrorin 2000, Tsumagari 2002)]
Sb (IV)	<i>-mə</i> [coordinative CVB (Li and Zhong 1986), imperfective CVB (Norman 1974)]	<i>-čī</i> [conditional CVB (Li and Zhong 1986, Norman 1974)]

Table 4-1 organizes existing descriptions of **-mi* and **-rAk-* in each Tungusic language. We can verify that the definitions of the **-mi* ending show distinctions among the Tungusic languages, unlike those of the **-rAk-* ending. Firstly, the **-mi* forms in the first group of Tungusic except Solon are mainly described as conditional converbs. However, this does not apply to the converbal ending *-mi* in Solon, which is spoken in the Chinese territory, although it belongs to the same genetic classification. In the second and third group of Tungusic languages near the Russian Far East, the **-mi* ending is mostly defined as a simultaneous converbal form that connects two coincident events. Nonetheless, note that the converbal suffix *-mi* in Hezhen, the only Chinese Tungusic language among the second group, is generally described as a coordinative converb, which coincides with Solon. Thirdly, the *-mə* in Manchu (including Sibe), which is also distributed inside the Chinese border, is regarded as an imperfective or coordinative converbal form; in these characteristics, it bears similarities to Solon and Hezhen. In sum, judging from the previous studies on the converbal form **-mi*, we can confirm that descriptions of **-mi* vary according to the geographical distribution of Tungusic languages²².

Few studies, however, have been conducted concerning the differences of the converbal ending **-mi* among the Tungusic languages, and there are only two brief comments (Benzing 1956 and Kazama 2003b, 2010a, and 2010b).

4.1.1. Benzing (1956)

Benzing (1956) points out that the *-mə* in Manchu deviates from the ordinary semantic functions of **-mi* in the other Tungusic languages, providing an example of a supine as illustrated below.

²² The gloss analysis for the converbal ending **-mi* in each example sentence in this paper will be differently done on the basis of the representative description in the three area-based Tungusic groups—North Tungusic (COND.CVB), East Tungusic (SIM.CVB), and South Tungusic (IMPF.CVB).

Die Bedeutung im Ma. (Supinum: *ara.mə dosi-ka* ‘er ging hinein um zu schreiben’) weicht von der sonst in den tg. Sprachen üblichen Bedeutung ab: ‘während man ... tut’, ‘als ein ... Tuender’, z. B. Udh. *Mahi bi.mi, atahi dəu* ‘kräftig seiend, wirst du nicht ermüden’.

(Benzing 1956: 143)

Manchu

· Supine (purposive interpretation)

4-3) *ara-mə* *dosi-ka.* ‘He entered to write.’
 write-IMPF.CVB enter-PTCP.PST

(Benzing 1956: 143)

4.1.2. Kazama (2003b, 2010a, and 2010b)

In addition, Kazama (2003b, 2010a, and 2010b) states that the converbal form **-mi* slightly differs in function among the Tungusic languages, observing that the **-mi* in the first group of Tungusic does not have alternative forms by number, unlike the third group of Tungusic, and generally conveys conditional meaning.

Nevertheless, both comments are limited to briefly mentioning the differences of **-mi* among Tungusic without elaborating on the cause of them.

4.2. Typological parameters of converbs

Figure 4-1. Typological parameters of converbs

1. morpho-syntactic parameters · person marking · number marking · switch-reference · auxiliary verb structure · grammaticalization of speech verbs	2. semantic parameters · simultaneity · anteriority · causality · purposive · conditional
---	---

This study adopts typological parameters of converbs listed in Figure 4-1 to determine the functions of the converbal ending **-mi* in the Tungusic languages from an areal-typological perspective. The morpho-syntactic parameters of converbs consist of person marking, number marking, switch-reference, auxiliary verb structure, and grammaticalization of speech verbs. In regard to semantic parameters, I focus on the five

semantic functions: simultaneity, anteriority, causality, purposive, and conditional.

As for adjacent languages, the same typological standards of converbs will be employed in application to the following imperfective converbal endings: *-t* in Kolima Yukaghir, *-A* in Sakha, *-ja* in Russian, and **-ju* in Mongolic (Buryat, Dagur, and Khalkha Mongolian). These imperfective converbal elements in the contiguous languages are chosen due to the semantic correspondence with the **-mi* in Tungusic, in that they can create multi-semantic functions according to the context with the simultaneous interpretation as a basis. Moreover, as far as auxiliary verb structure and purposive criteria are concerned, Chinese is additionally examined, although the grammatical category “converb” is absent in Chinese.

4.3. Morpho-syntactic parameters

In order to examine the functions of converbal ending **-mi* in Tungusic from areal linguistics point of view, § 4.3 applies the previously-mentioned five morpho-syntactic parameters of converbs to the **-mi* in Tungusic and semantically-corresponding imperfective converbal endings in the adjacent languages.

4.3.1. Person marking

Depending on whether or not a person marker is attached to a converbal form to denote the subject in the subordinate clause, converbs are cross-linguistically organized into two types, namely (i) person marking and (ii) non-person marking converbs. As (4-4) illustrates, a converb with *-ku* in Eskimo requires a person ending to mark the person of the subject in the antecedent clause. On the contrary, such a person marking system in the converb does not occur in languages like Korean, as shown in (4-5). Note that the analysis of person marking on the converb in **-mi* will be judged from the synchronic viewpoint.

(i) *person marking type of converb (Eskimo)*

4-4) *mylug-lu-ku*, *aqum-uma-q*.
 smoke-CVB-3SG.DS sit.down-PST-3SG

‘Having started to smoke, he sat down.’

(Menovščikov and Vaxtin 1983: 143)

(ii) non-person marking type of converb (Korean)

4-5) *keu=neun kongpuha-ko, na=neun eumak-eul teul-ett-ta.*
 he=TOP study-IMPF.CVB I=TOP music-ACC listen-PST-FINIT
 ‘He studied and I listened to the music.’

4.3.1.1. Udihe

As indicated in Table 4-2, the converbal endings in Udihe are classified into two groups according to the use of the person suffix, i.e., person and non-person marking converbs. The converbal form *-mi* in Udihe, categorized as a non-person marking converb, does not encode a person in the converbal form, as in the following example (4-6).

Table 4-2. Converbs in Udihe (Based on Girfanova 2002, Kazama 2010a)

		singular	plural
non-person marking converb	SIM.CVB.	<i>-mi</i>	<i>(-mAi)</i>
	ANT.CVB.	<i>-(gA)Asi</i>	
	AT.CVB.	<i>-nAA</i>	
	CONT.CVB.	<i>-mdi</i>	
	COND.CVB.	<i>-li(ə)</i>	
	SER.CVB.	<i>-Ak</i>	
person marking converb	COND.CVB.	<i>-(l)isi-PERS</i>	
	PURP.CVB.	<i>-lAgA-PERS</i>	
	RE.PST.CVB	<i>-ŋiA-PERS</i>	
	IM.CVB.	<i>-Anji-PERS</i>	

4-6) *sitə-wə baata baa-mi, bagdi-i-ti.*
 child-ACC boy obtain-SIM.CVB live-PTCP.PRS-3PL
 ‘Obtaining a boy, they are living.’

(Kazama 2004: 318)

4.3.1.2. Tungusic

As with Udihe, converbs in other Tungusic languages generally consist of non-person and person marking converbs in accordance with addition of person marker in the

converbal form with the exceptions of Manchu and Sibe. Converbs in the two latter South Tungusic languages are never marked by person, as is the case on the finite indicative forms. Hence, all Tungusic languages are consistent in that person category is not attached to the converbal form **-mi* from the synchronic perspective because it belongs to the non-person marking type of converb. Due to the restriction of space, I list the examples (4-7)-(4-10) of the **-mi* form from the following four Tungusic languages (Evenki (I), Orochi (II), Nanay (III), and Manchu (IV)), chosen according to genetic classification and areal distribution of Tungusic.

• **Evenki (I)**

4-7) *əŋəsi bi-mi, ɣorča-mači-mu-ja-ča-n.*
 strong be-COND.CVB fight-RECP-VOL-IMPF-PTCP.PST-3SG
 ‘He wanted to fight with somebody because he was strong.’

(Nedjalkov, I.V. 1995: 456)

• **Orochi (II)**

4-8) *biti lali-mi, bu-jaŋə-pi.*
 we.INCL starve-SIM.CVB die-PTCP.FUT-1PL.INCL
 ‘We will starve to death.’

(Avrorin and Boldyrev 2001: 365)

• **Nanay (III)**

4-9) *moskva-či dəgdəəči-mi pulsi-mi,*
 Moscow-DIR fly-SIM.CVB go-SIM.CVB
əm mama-wa baa-xa-mbi=goani.
 one grandmother-ACC meet-PTCP.PST-1SG=CLT
 ‘Flying to Moscow, I met a grandmother.’

(Kazama 2010b: 103)

• **Manchu (IV)**

4-10) *bithə bə kubuli-mə, manju gisun i ara-ki.*
 script ACC change-IMPF.CVB Manchu language INS write-OPT.1
 ‘Let’s change the script and write in Manchu.’

(Li 2000: 362)

4.3.1.3. Neighboring languages

As a general rule, the imperfective converbal endings in the adjacent languages are not encoded by person. First of all, the person element is never added to imperfective converbal suffix *-t* in Kolima Yukaghir and imperfective gerund suffix *-ja* in Russian, as exemplified in (4-11) and (4-12). Furthermore, the imperfective converb with *-A* in Sakha, in principle, is not marked by person as well, except the reduplicated use of the converbal form (cf. Pakendorf (2007: 274) and example (4-13)). With regard to the adjacent Mongolic languages (Buryat, Dagur and Khalkha), imperfective converbal endings **-ju* never demand the person in the converb. Examples are given in (4-14) to (4-16).

• Kolima Yukaghir

- 4-11) *t'okoje min-dele šukume t'ine-t jolo-do-ko qon-i.*
 nife take-ANT.CVB at.random cut.out-IMPF.CVB behind-3SG-LOC go-IND.INTR.3
 'Taking the nife and cutting out randomly, [He] went behind her.'

(Nagasaki 2013: 43)

• Russian

- 4-12) *žela-ja skoree uexat', on toropilsja zakončit' rabotu.*
 wish-IMPF.GRD quick leave he hasten.PST.M finish work
 'Wishing to leave as soon as possible, he hastened to finish his work.'

(Wade 2011(1992): 388)

• Sakha

- 4-13) *onno tul-la-n-a tul-lan-a-bun,*
 that.LOC word-VBLZ-REF-IMPF.CVB word-VBLZ-REF-IMPF.CVB-1SG
haah-um kuaj-bat da buol-lar huussuh-an kiir-bit-im.
 spring-1SG be.able-PRS.NEG PART AUX-COND.IRLIS race-ANT.CVB enter-PST-1SG
 'There I begged and begged, and even though I wasn't old enough, I ran after them.'

(Pakendorf 2007: 275)

• Buryat

- 4-14) *Xartagaj xaani basagad-ta ošo-žo, xele-ne.*
 Xartagaj Xaan.GEN girl.PL-DAT go-IMPF.CVB say-N.PST
 'Going to Xartagaj Xaan's girls, he says.'

(Barannikova et al. 2000: 100)

• **Dagur**

4-15) *tər ič-əʃ, əur uʃ-bəi-ø.*
 that go-IMPF.CVB sickness look-IMPF-3
 ‘Going, [he] has a checkup.’

(Zhong 1982: 63)

• **Khalkha**

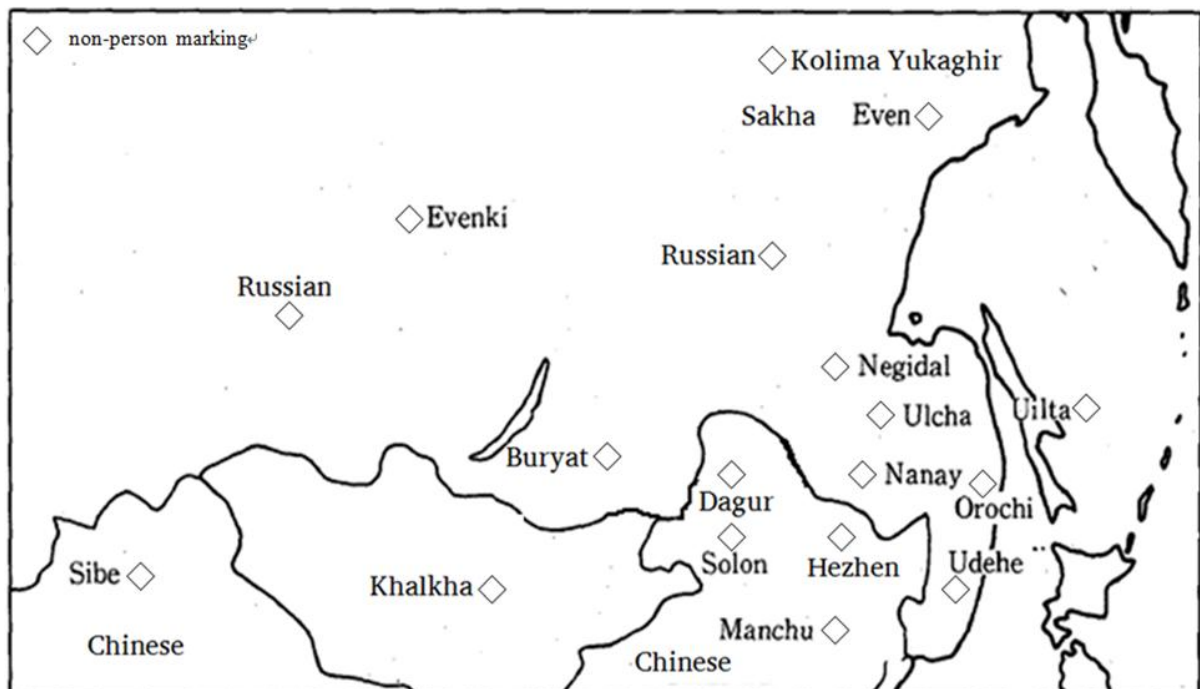
4-16) *neg uneg gui-ʃ ir-ʃai.*
 one fox run-IMPF.CVB come-RES
 ‘A fox came running.’

(Janhunen 2012: 225)

4.3.1.4. Summary

As shown in Map 4-1, the converbal ending **-mi* in Tungusic generally coincides with other semantically-corresponding imperfective converbs in the adjacent languages in that a person is not grammatically encoded in the converbal form. As far as Sakha is concerned, the attachment of person is, exceptionally, restricted to the reduplicated use of the imperfective converbal element.

Map 4-1. Converbal ending **-mi* in Tungusic and imperfective converbal endings in the neighboring languages from the person marking perspective



4.3.2. Number marking

Converbs in some languages can be inflected by number according to the singularity or plurality of the subject of the subordinate clause. For instance, the nominal plural suffix *-teul* in Korean, as found in (4-17), can be encoded in the converbal form *-go* for the plural subject of the sentence. In contrast, such a number marking system is not attested in Japanese converbs (4-18). Concerning number marking analysis, either the synchronic or the diachronic perspective is adopted.

(i) number marking type of converb (Korean)

4-17) *haksaeng-teul=eun maneun caek-eul sa-go-teul ha-n-ta.*
 student-PL=TOP a.lot.PTCP book-ACC buy-IMPF.CVB-PL do-N.PST-FINIT
 ‘Students usually buy a lot of books.’

(ii) non-number marking type of converb (Japanese)

4-18) *kare-ra=wa gakko-e it-te, gohang-wo tabe-ta.*
 he-PL=TOP school-DIR go-IMPF.CVB meal-ACC eat-PST
 ‘They went to school and had a meal.’

4.3.2.1. Udihe

The converbal form *-mi* in Udihe shows a clear distinction in number marking on the basis of geographically-divided dialects. The *-mi* in northern Xor dialect, shown in instance (4-19), can be marked by number with the alternative plural form *-mAi*, presumed as a combination of converbal ending **-mi* and plural reflexive suffix **-bAAri* from the diachronic point of view. On the contrary, the author cannot attest such a plural marking phenomenon in southern Bikin dialect near the Chinese border, as mentioned in Kazama (2010a). In examples such as (4-20), only the *-mi* form is used regardless of the number in Bikin Udihe. In short, there is a disparity of number marking in the converbal ending *-mi* between the northern Xor and southern Bikin dialects in Udihe.

· Xor dialect

4-19) *tuu gakti-mai, budə-ə-ti.*
 all get.frozed-SIM.CVB.PL die-PTCP.PST-3PL
 ‘[They] were all frozen to death.’ (Kormushin 1998: 97)

· Bikin dialect

4-20) *sitə-fi* ***igisi-mi***, *bagdi-a-ti*.
 child-REF.PL raise-SIM.CVB live-PTCP.PST-3PL
 ‘Raising their child, [they] lived.’

(Kazama 2010a: 223)

4.3.2.2. Tungusic

Table 4-3. Number marking in the Tungusic converbal ending **-mi*

		SG	PL	Type
N.T.	Ek (I)	<i>-mi</i>	<i>-mi-l</i> (COND.CVB-PL)	NOM.PL
	E (I)	<i>-mi</i>	· Western E.	non-marking
		<i>-mi</i>	· Arman E. <i>-mur</i> (< <i>-mi</i> +REF.PL* <i>-bAAri</i>)	REF.PL
E.T.	N (I)	<i>-mi</i>	<i>-mAj</i> (< <i>-mi</i> +REF.PL* <i>-bAAri</i>)	REF.PL
	Ol (III)	<i>-mi</i>	<i>-mAAri</i> (< <i>-mi</i> +REF.PL* <i>-bAAri</i>)	REF.PL
	Nn (III)	<i>-mi</i>	<i>-mAAri</i> (< <i>-mi</i> +REF.PL* <i>-bAAri</i>)	REF.PL
	Oc (II)	<i>-mi</i>	<i>-mAj</i> (< <i>-mi</i> +REF.PL* <i>-bAAri</i>)	REF.PL
	Ut (III)	<i>-mi</i>	<i>-mAAri</i> (< <i>-mi</i> +REF.PL* <i>-bAAri</i>)	REF.PL
	U (II)	<i>-mi</i>	Xor U. <i>-mAj</i> (< <i>-mi</i> +REF.PL* <i>-bAAri</i>)	REF.PL
			Bikin U. <i>-mi</i>	non-marking
	S (I)	<i>-mi</i>	<i>-mi</i>	non-marking
S.T.	Hz (II)	<i>-mi</i>	<i>-mi</i>	non-marking
	M (IV)	<i>-mə</i>	<i>-mə</i>	non-marking
	Sb (IV)	<i>-mə</i>	<i>-mə</i>	non-marking

As represented by Table 4-3, the Tungusic converbal form **-mi* in the Russian region can be generally marked by number depending on whether there is a singular or plural subject in the subordinate clause. However, there is a difference in marking plurality in **-mi* converbs between North Tungusic (Evenki) on the one hand and East Tungusic (Negidal, Ulcha, Nanay, Orochi, Uilta, and Udihe (Xor)) on the other. Specifically, Evenki (4-21) can mark the converb with *-mi* with nominal plural suffix *-l* to express the plurality of the subject, as confirmed in other non-person marking type of

converbal suffixes as well. Before referring to East Tungusic languages, it should be noted that the plural marking in the *-mi* converb, with neither nominal plural suffix nor reflexive plural suffix, is not confirmed in Even, as in (4-22). This is inconsistent with other non-person marking type of converbs in Even (e.g., nominal plural marking: simultaneous converbal ending *-nikAn* (SG.), *-nikAr* (PL.), reflexive plural marking: anterior converbal ending *-riʃɪ* (SG.), *-riʃür* (PL.)). Nevertheless, the Arman dialect of Even maintains reflexive plural marking for the converbal form *-mi* (See Rišes 1955). With regard to East Tungusic languages, Negidal (4-23), Ulcha (4-24), Nanay (4-25), Orochi (4-26), Uilta (4-27), and Xor Udihe commonly possess alternative forms of **-mi* in accordance with number, which is diachronically speculated to originate from combination of the converbal ending **-mi* plus reflexive plural suffix **-bAAri*. The use of different forms of **-mi* according to number is universal in East Tungusic. Nonetheless, the converbal form *-mi* in the Bikin dialect of Udihe, distributed in most southern areas of the Far-east Asia near the Chinese border, does not show an inflection by number. Lastly, in South Tungusic (Solon, Hezhen, Manchu, and Sibe) inside the Chinese border, only the **-mi* form occurs irrespective of subject number in sentence, as (4-28), (4-29), (4-30), and (4-31) indicate.

North Tungusic

Evenki (I)

<i>bira-l</i>	‘river’	<i>sulaki-l</i>	‘foxes’	<i>moo-l</i>	‘trees’
river-PL		fox-PL		tree-PL	

(Nedjalkov, I. V. 1997: 141)

4-21) <i>ʃu-la-wər</i>	<i>əmə-mi-l,</i>	<i>ʃəp-čo-tin.</i>
house-DIR-REF.PL	come-COND.CVB-PL	eat-PTCP.PST-3PL
‘Having come home, [they] ate.’		

(Nedjalkov, I. V. 1995: 445)

Even (I)

4-22) <i>öldamɪ-na-mɪ</i>	<i>küŋa-l-nün</i>	<i>hor-gərə-rə-p.</i>
fish-DIRINT-COND.CVB	child-PL-COM	go-HAB-N.FUT-1PL.INCL
‘We go fishing with children.’		

(B. Pakendorf fielddata)

• East Tungusic

Negidal (I)

- 4-23) *kəkkul ələ gojodu ətə-čəə-tin kəkku-məj,*
 cuckoo.PL already for.long finish-PTCP.PST-3PL cuckoo-COND.CVB.PL
ələ bora-laa-waj əsidgi-čaa-l bi-ǰəŋə-tin.
 already homeland-LOC-REF.PL reach-PTCP.PST-3PL be-PTCP.FUT-3PL
 ‘Already stoped cuckooing, the cuckoos might have already reached their homelands.’
 (Pevnov and Khasanova 2003: 272)

Ulcha (III)

- 4-24) *mun naanjɪ-sal xai-maari, tūčapačɪ bi-či-ti..*
 we.GEN Ulcha-PL do.that.way-SIM.CVB.PL run.away.MULT be-PTCP.PST-3PL
 ‘Our Ulcha people were running away by doing that way.’
 (Kazama 2010c: 76)

Nanay (III)

- 4-25) *əm modan=tanii xupi-məəri=təni, ənin-či-ji ǰiǰu-xə-či.*
 one time=CLT play-SIM.CVB.PL=CLT mother-DIR-REF.SG return-PTCP.PST-3PL
 ‘One time playing around, [They] returned to one’s mother.’
 (Kazama 2010b: 142)

Orochi (II)

- 4-26) *biti awaasi ǰəŋə-məi, uwa-ǰaŋa-pi?*
 we.INCL where go-SIM.CVB.PL save-PTCP.FUT-1PL.INCL
 ‘Where will we go and save [someone]?’
 (Avrorin and Boldyrev 2001: 365)

Uilta (III)

- 4-27) *ga čii ǰəŋə-məri čii ǰəŋə-məri, duga duga ǰənnəe-či.*
 INTJ further go-SIM.CVB.PL further go-SIM.CVB.PL winter winter go+PTCP.PRS-3PL
 ‘In Winter, [they] go and go further.’
 (Ikegami 2002b: 41)

• South Tungusic

Solon (I)

- 4-28) *əmun buxul əwəŋkə aɪmag-səl boŋgon nuulgii-m,*
 one all Evenki community-PL all move.out-IMPF.CVB
nuulgii-m ul-ǰi-səə=sitə.
 move.out-IMPF.CVB go-PROG-PST=CLT

‘All of Evenki communities were moving out.’

(Kazama 2007c: 67)

Hezhen (II)

4-29) *tigurun xofur xofur sokutu-mi omi-xə-ti.*
they OMTP get.drunk-IMPF.CVB drink-PTCP.PST-3PL

‘Getting drunk, [they] drank.’

(Tamura 2008: 43)

Manchu (IV)

4-30) *musə šun cəng duka alban diyan i baru tata-mə gənə-ki.*
we.INCL Shuncheng gate public.affair place GEN toward watch-IMPF.CVB go-OPT.1

‘We want to go to public affairs bureau at Shuncheng gate for watch.’

(Sung 1968: 84)

Sibe (IV)

4-31) *təs ju nan inji-mə, ji-m.*
those two person laugh-IMPF.CVB eat-IMPF

‘Laughing, those two persons are eating.’

(Li and Zhong 1986: 86)

4.3.2.3. Neighboring languages

In principle, the imperfective converbal endings in the contiguous languages are not marked by number in the converbal forms as well. As given in (4-32), Nagasaki (2013) refers to Kolima Yukaghir that neither person nor number is encoded in the imperfective converbal element *-t*. Likewise, number marking does not occur in the Russian imperfective gerund *-ja* (cf. (4-33)). As for Sakha, the imperfective converbal form *-A*, except the reduplicated use with its low frequency, never encodes the plural element. Lastly, the imperfective converbal endings **-ju* in the Mongolic languages (Buryat, Dagur, and Khalkha) never present an inflection of number in the converbal form, as in (4-34)-(4-36).

Kolima Yukaghir

4-32) *tāt ejre-t qan-uji-t, n’e=nugu-nnu-l’el-ni.*
thus walk-IMPF.CVB roam-MULT-IMPF.CVB RECP=find-HAB-INFR-PL

‘Thus they would roam around and meet each other.’

(Maslova 2001: 124)

Russian

- 4-33) *žela-ja skoree uexat', oni toropilis' zakončit' rabotu.*
wish-IMPF.GRD quick leave they hasten.PST.PL finish work
'Wishing to get away as soon as possible, they hastened to finish his work.'

Buryat

- 4-34) *una-ja, bodo-jo, xoino-hoo-n' shergüüse-lde-ne-bdi.*
fall.down-IMPF.CVB get.up-IMPF.CVB behind-ABL-3 trail.after-RECP-N.PST-1PL
'Falling down and rising again, we are trailing after him.'

(Skribnik 2003: 116)

Dagur

- 4-35) *təd nəkənd xuurtii d^watər aa-ǰ, sain gučəəlii bol-lən.*
that.PL together forest.GEN inside be-IMPF.CVB good friend become-PST
'Living together in forest, they became good friends.'

(Enhebatu et al. 1985: 49)

Khalkha

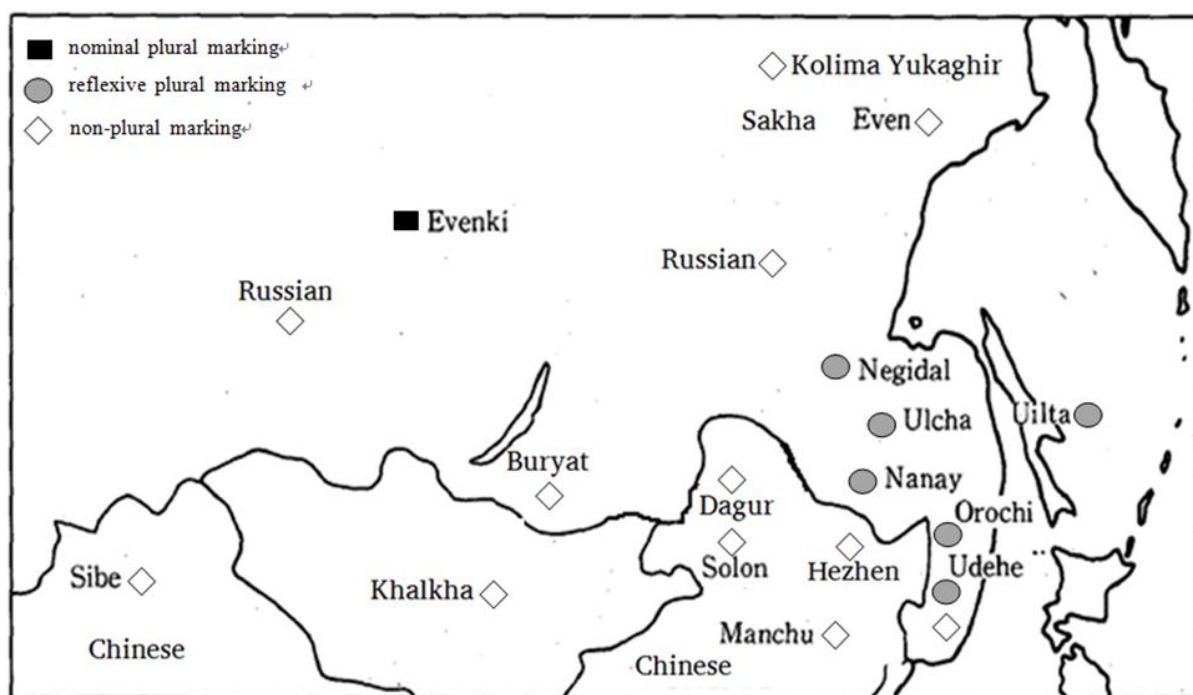
- 4-36) *ted ene tuxaj ja'-ǰ ja-ǰ, jav-san.*
that.PL this about talk-IMPF.CVB talk-IMPF.CVB leave-PTCP.PST
'Talking and talking about this, they left.'

(fielddata)

4.3.2.4. Summary

As illustrated in Map 4-2, the number marking system in the Tungusic converbal ending **-mi* can be generally grouped into three patterns according to plural marking, namely (i) nominal plural marking, (ii) reflexive plural marking **-bAAri*, and (iii) non-plural marking types. For instance, the converbal form *-mi* in Evenki can take the nominal plural element *-l* to indicate the plurality of the subject in the subordinate clause. On the contrary, this plural marking phenomenon is not attested in the *-mi* form of Western Even, unlike other non-person converbs (e.g., simultaneous and anterior converbal endings). The non-existence of plural marking in Even is similar to that of the imperfective converbal form in the neighboring Kolima Yukaghir language.

Map 4-2. Converbal ending **-mi* in Tungusic and imperfective converbal endings in the neighboring languages from the number marking perspective



Regarding East Tungusic languages (Negidal, Ulcha, Nanay, Orochi, Uilta, and Udihe), the converbal element **-mi* commonly uses the alternative forms **-mAAri* for plural marking, speculated to be the complex of converbal marker **-mi* and reflexive plural suffix **-bAAri*. Nevertheless, Udihe is verified to differ in number-marking depending on dialect divided by area. The northern Xor dialect has an alternative form of the converb with *-mi* for the plural subject in sentence, which is consistent with other East Tungusic languages. However, such a plural marking phenomenon does not occur in the converbal ending *-mi* of the southern Bikin dialect, as with Tungusic on the Chinese side. Lastly, South Tungusic languages (Solon, Hezhen, Manchu, and Sibe) never encode number in the converbal form **-mi* since it remains as the **-mi* form without reference to singularity or plurality of the subject in sentence. Concerning the adjacent Mongolic languages, the syntactic encoding of number is likewise absent in the semantically-corresponding imperfective converbal forms. The results from this observation indicate that the marking of plurality in the converbal ending **-mi* of North (Evenki) and East Tungusic is highly likely to be the result of internal change rather than contact-based influence, since there is no clear relation between these Tungusic and contiguous languages. As for Even, however, the non-marking of plurality in the **-mi* form coincides with the imperfective converb in Kolima Yukaghir. Furthermore, it is

remarkable that the lack of number marking in the **-mi* forms of South Tungusic is consistent with the imperfective converbal endings **-ju* in the neighboring Mongolic languages.

4.3.3. Switch-reference

Nedjalkov, V.P. (1995) proposes that converbs can be cross-linguistically classified into three types—(i) same-subject converbs, (ii) different-subject converbs, and (iii) variable-subject converbs—according to whether the subjects in the subordinate and main clauses are coreferential or not. The examples for the three types are given in (4-37), (4-38), and (4-39)-(4-40), respectively.

(i) SS converb (Bashkir)

- 4-37) *ap-ak zur paroxod **sajkal-yp** jöz-op bar-a.*
 very-white big steamer rock-CVB.SS float-CVB go-PRS
 ‘The big white steamer floats, rocking to and fro.’

(Juldašev 1977: 53)

(ii) DS converb (Bashkir)

- 4-38) *ul qapqany šyğyrđatyn as-yp **in-gänse,***
 he gate.ACC creak.CVB open-CVB go.in-CVB.DS
Salix duđǵal-maj baθ-yp tor-zo.
 Salix move-CVB press-CVB stand-PST
 ‘Until he went inside, opening the gate with a creak, Salix stood motionless.’

(Juldašev 1977: 80)

(iii) VS converb (Estonian)

SS

- 4-39) *ületa-des jõge, pöördus ratsanik ulati paremale.*
 cross-CVB.VS river turned horseman always right
 ‘Crossing the river, the horseman always turned right.’

(Nedjalkov, V. P. 1995: 104)

DS

- 4-40) *talve möödu-des, nägin teda uuesti.*
 winter.GEN pass-CVB.VS see.PST.1SG him again
 ‘After the winter I saw him again.’

(Nedjalkov, V. P. 1995: 110)

4.3.3.1. Udihe

As mentioned in Girfanova (2002) and Kazama (2010a), the converbal ending *-mi* in Udihe can be included in the SS converb because it is dominantly used in the same-subject situation. Here are the exceptional examples ((4-41) and (4-42)) of different subject with the use of the converb with *-mi*, which respectively correspond with a condition and participants overlap and a description of the main clause perceived by the main clause subject in the statements concerning the exceptional DS use of the converbal ending *-mi* in Evenki by Nedjalkov, I.V. (1995).

· condition and participants overlap

- 4-41) *uti site-du-ji xəbulə-mi, agda-jaŋa-i.*
that child-DAT-REF.SG carry-SIM.CVB be.glad-PTCP.FUT.-?
'If you carry that to your child, he (= the child) will be glad.'

(Kazama 2004: 73)

· a description of the main clause perceived by the main clause subject

- 4-42) *omo bua-la iinə-mi, inai goo-li-ga.*
one place-LOC arrive-SIM.CVB dog bark-INC-PST
'When [we] arrived at a place, a dog began to bark.'

(Kazama 2006a: 19)

4.3.3.2. Tungusic

In principle, the converbal ending **-mi* in all Tungusic languages is dominantly used in the same-subject situation, as generally described in previous literature (Koleskinova and Konstantinova (1968), Malchukov (1995), Nedjalkov, I.V. (1995, 1997), Tsumagari (2002, 2009a, 2009b), Kazama (2010b, 2010c)). This is considered to be closely related to the fact that person is not marked in the **-mi* converbs. However, it is true that there are some exceptions. Nedjalkov, I.V. (1995: 458-459), a descriptive grammar of Evenki, states that (i) part-whole or possessive relation, (ii) "if the main clause describes a situation perceived by the main clause subjects", (iii) condition and participants overlap between the subjects in the subordinate and main clauses can allow different-subject, although it rarely occurs. Similar cases occur in other Tungusic languages as well, as shown in (4-43) to (4-46). In this study, nevertheless, these three conditions of allowing DS constructions with the converbal ending **-mi* are regarded as

exceptional phenomena due to their low frequency.

Evenki (I)

· condition and participants overlap

- 4-43) *aʃa-t* *uj-mi*, *oron* *ə-tə-n* *sukča-ra*.
good-INS tie-COND.CVB deer NEG-FUT-3SG run.away-PTCP
‘If one ties a reindeer well, it will not run away.’

(Nedjalkov, V. P. 1995: 459)

- 4-44) *bu* *ʃə-mu-l-mi*, *Chochan* *uli-ʃəŋə-n*.
we.EXC eat-VOL-INC-COND.CVB Chochan feed-PTCP.FUT-3PL
‘If we are hungry, Chochan will feed us.’

(Nedjalkov, V. P. 1995: 459)

Negidal (I)

· condition and participants overlap

- 4-45) *əmə-mi*, *bii* *sinətki* *čopal* *taj-wa* *ulgučən-ʃə-w*.
come-COND.CVB I 2SG.DIR all that-ACC tell-PTCP.FUT-1SG
‘If you come, I will tell you all.’

(Kazama 2002: 121)

Nanay (III)

· a description of the main clause perceived by the main clause subject

- 4-46) *tui* *dəgdə-mi* *dəgdə-mi*,
that.way fly-SIM.CVB fly-SIM.CVB
irgən *dujəə-lə-ni* *əm* *ʃookaan* *bi-či-ni*.
village upper-LOC-3SG one small.house be-PTCP.PST-3SG
‘When [he] fled and fled that way,
[he perceived that] there was a small house in the upper village.’

(Kazama 2010b: 150)

4.3.3.3. Neighboring languages

According to Nagasaki (2013), Ebata (2013), and Wade (2011 (1992)), the imperfective converbal elements in Kolima Yukaghir, Sakha, and Russian are identically used in coreferential construction between subjects in the antecedent and consequent clauses. With respect to adjacent Mongolic languages, previous studies (Skribnik 2003, Tsumagari 2003, and Janhunen 2012) comment that the imperfective converbal endings

*-*ju* are mostly employed in same-subject constructions as well. Nonetheless, the Mongolic imperfective converb *-*ju* has a tendency to be allowed in DS circumstances as well, even in coordinative construction, in comparison with the Tungusic converbal form *-*mi*, as illustrated in the following examples:

Buryat

- 4-47) *ejy-m ünyee haa-ža,*
 mom-1SG cow.INDEF.ACC to.milk-IMPF.CVB
bi xažuuda-n' honyoo xööre-že bai-gša hem.
 I beside-3 news.REF narrate-IMPF.CVB be-PTCP PST.PART.1SG
 'My mom was milking a cow and I was telling her my news beside her.'
 (fielddata)

- 4-48) *nüxer-ni kino xara-ža, bi xügžem šagna-ža bai-na-b.*
 friend-1SG film watch-IMPF.CVB I music listen.to-IMPF.CVB be-N.PST-1SG
 'My friend is watching a film and I am listening to music.'
 (fielddata)

Khalkha

- 4-49) *aav min' nom unši-ž, bi tüü-nijg bič-sen.*
 father I.GEN book read-IMPF.CVB I this-ACC write-PTCP.PST
 'My father read a book and I wrote this.'
 (Yamakoshi 2012: 121)

- 4-50) *Dorž morin xuur tata-ž, Dulmaa duu duul-dag.*
 Dorz horse khuur play-IMPF.CVB Dulmaa song sing-PTCP.HAB
 'Dorž always plays Morin Khuur (traditional musical instrument) and Dulmaa always sings a song.'
 (Yamakoshi 2012: 121)

4.3.3.4. Summary

In short, the converbal ending *-*mi* in Tungusic, as summarized in Map 4-3, coincides with the semantically-corresponding imperfective converbs in the adjoined languages in that it is generally employed in coreferential circumstances and this consistency is closely related to the feature of non-person marking in the converbal forms. Still, it should be emphasized that the imperfective converbal endings *-*ju* in Mongolic can be used either SS or DS circumstances even in coordinative construction,

although it is true that they are frequently used in same-subject situation, as raised by previous studies.

Map 4-3. Converbal ending **-mi* in Tungusic and imperfective converbal endings in the neighboring languages from the switch-reference perspective



4.3.4. Auxiliary verb structure

In this study, the definition of auxiliary verb is based on Anderson's (2006b: 4-5) statement that "auxiliary verb is [...] considered to be an item on the lexical verb-functional affix continuum, which tends to be at least somewhat semantically bleached, and grammaticalized to express one or more of a range of salient verbal categories, most typically aspectual and modal categories, but also not infrequently temporal, negative polarity, or voice categories." The auxiliary verb in many languages analytically combines with a converbal form to create a grammatical effect, as found in (4-51) and (4-52).

· progressive: V_1 -CVB + V_2 'be' (Tamil)

4-51) *kumaar enkal viiṭ-ṭ-il taṇk-i iru-kkir-aan.*

Kumar we.OBL house-LOC stay-CVB be-PRS-3SG.M

'Kumar is sitting on the chair.'

(Lehmann 1993 (1989): 206)

· benefactive: V₁-CVB + V₂ ‘give’ (Tamil)

4-52) *raajaa kumaar-ukku k katav-ai t tira-ntu kotu-tt-aan.*

Raja Kumar-DAT door-ACC open-CVB give-PST-3SG.M

‘Raja opened the door for Kumar.’

(Lehmann 1993 (1989): 227)

Over the past years, some previous works have discussed the auxiliary verb from the viewpoint of areal linguistics. Masica (1976) first raised a possibility that the development of auxiliary verbs shows noticeable distinctions on the basis of areal distribution, taking examples of Indo-Aryan, Dravidian, Mongolian, Korean, and Japanese. Most of these languages are known to adopt the above-mentioned analytical structure of converb and auxiliary verb to constitute auxiliary verb structure. As far as the Tungusic languages are concerned, Kazama (2014) states that there are many auxiliary verbs in Solon, Manchu, and Sibe that had or still have contact with Mongolian and/or Chinese, whereas such a grammaticalization has not generally developed in most other Tungusic languages. In other words, he claims that the prototypical Tungusic, in general, does not retain the auxiliary verb as a syntactic feature, insisting that such a phenomenon is highly likely to stem from the influence of Mongolian or Chinese. However, these precedent studies are focused on the auxiliary verb itself rather than its syntactic structure. Therefore, the considerations concerning auxiliary verb construction from the perspective of converbal form have not been thoroughly conducted and still remain unsolved. In addition, the specific developmental differences of auxiliary verb among the Tungusic languages need to be clarified.

The auxiliary verb structure is defined in this paper as follows: the lexical meaning of the verb 2 that follows verb 1 marked by **-mi* is faded at some extent and functions as a grammatical element (expressing tense-aspect-mood characteristics). As schematized in Figure 4-2, this study puts its focus on the following seven parameters: (a) inceptive, (b) completive, (c) capable, (d) progressive, (e) attemptive, (f) benefactive, and (g) perfective. These parameters are used to verify auxiliary verb structure with the employment of the converbal ending **-mi* in Tungusic. We can attest that the weakening of semantic meaning in the auxiliary verb has a tendency to grow from inceptive, completive, capable to progressive, attemptive, benefactive, and perfective in order. The converb in the former three auxiliary verb structures functions similarly to the infinitive

verb.

Figure 4-2. Typological parameters of auxiliary verb structure²³

a. inceptive: $V_1-mi + V_2$ ‘start’ b. completive: $V_1-mi + V_2$ ‘finish or end’ c. capable: $V_1-mi + V_2$ ‘can’ * <i>alba</i> - ‘unable’ * <i>mutə</i> - ‘able’ * <i>ulxi</i> - ‘understand’ * <i>baka</i> - ‘obtain’ or * <i>bahana</i> - ‘know’ * <i>o</i> - ‘become’	d. progressive: $V_1-mi + V_2$ ‘be’ e. attemptive: $V_1-mi + V_2$ ‘look’ f. benefactive: $V_1-mi + V_2$ ‘give’ g. perfective: $V_1-mi + V_2$ ‘put’
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4.3.4.1. Udihe

The results of applying the above-mentioned criteria to Udihe text demonstrate that the converbal ending *-mi* in Udihe forms four out of seven auxiliary verb structures as follows: (i) inceptive (4-53), (ii) completive (4-55), (iii) capable (4-56), and (iv) progressive (4-57). Concerning inceptive, a similar aspect effect can be synthetically expressed by the inceptive suffix *-l* in Udihe as well, as in the example (4-54). In addition, the verb *mutə*- ‘able’, as confirmed in (4-56), is known to serve as a capable-related auxiliary verb. However, it is not observed that the *-mi* is employed in the following auxiliary verb constructions: attemptive, benefactive, and perfective. See the elicitation data ((4-58)-(4-63)) from Udihe speakers. In short, the converbal form *-mi* in Udihe is restricted to connecting with inceptive, completive, capable-related auxiliary verbs, which relatively maintain the original lexical meaning. In this case, the converb with *-mi* functions like infinitive verb in these auxiliary verb structures. Furthermore, the

²³ In this section, the Tungusic and neighboring languages will be mainly compared in terms of their degree of auxiliary verb construction, connected by the converb with **-mi*, as follows. If a language forms all four auxiliary constructions described above, its degree of auxiliary construction is four; if it only forms one of those auxiliary constructions, its degree of auxiliary construction is one, and so on. As long as capable auxiliary verb structure is concerned, however, auxiliary verb types are likewise analyzed. The verb types for the capable-related auxiliary verb structure are limited to **alba*- ‘unable’, **mutə*- ‘able’, **ulxi*- ‘understand’, **baka*- ‘obtain’ or **bahana*- ‘know’, **o*- ‘become’ in order to maintain consistency in this study.

-*mi* in Udihe, apart from these infinitive-like functions, can also create the progressive aspect of auxiliary verb construction in combination with the copular verb *bi-* ‘be’.

i) inceptive (V_1 -*mi* + V_2 ‘start’)

Bikin dialect

- 4-53) *buu bon̄go klassa-la giə ʃawaŋda-a-mu niasulə-mi.*
 we.EXC first class-LOC together start-PTCP.PST-1PL.EXC study-SIM.CVB
 ‘We started to study together in the first grade.’

(Kanchuga and Tsumagari 2010: 18)

· inceptive suffix -*l*

- 4-54) *nuani mindulə xauntasi-li-ə-ni.*
 (s)he I.LOC ask-INC-PTCP.PST-3SG
 ‘(S)he started to ask me.’

(Kanchuga and Tsumagari 2010: 25)

ii) completive (V_1 -*mi* + V_2 ‘finish or end’)

- 4-55) *wakča-mi wadi-mi=a,*
 hunt-SIM.CVB finish-SIM.CVB=CLT
kiaŋa ijə-wə-ni ~ ʃuk-tigi əməgi-ʃəŋə-fi.
 deer horn-ACC-3SG house-DIR return-PTCP.FUT-1PL.INCL
 ‘If [we] finish hunting, [we] will bring that horn of deer home.’

(Kazama 2004: 563-4)

iii) capable (V_1 -*mi* + V_2 ‘can’)

- 4-56) *a-ta-i=da waa-mi mutə njaa minəwə.*
 NEG-FUT-2SG=CLT kill-SIM.CVB be.able still I.ACC
 ‘[You] cannot kill me again.’

(Kazama 2004: 89)

iv) progressive (V_1 -*mi* + V_2 ‘be’)

- 4-57) *uti ətətə-nə-mi, jəu diga-mi bi-i-ti.*
 that work-DIRINT-SIM.CVB what eat-SIM.CVB be-PTCP.PRS-3PL
 ‘Coming to work, what are [they] eating?’

(Kazama 2004: 383)

v) attemptive (V₁-mi + V₂ ‘look’)

4-58) **nuani uti kuniga-wa taŋi-mi isə-ə-ni.*
 (s)he that book-ACC read-SIM.CVB look-PTCP.PST-3SG
 ‘(S)he attempted to read that book.’

4-59) **uti kuniga-wa taŋi-mi isə-jə.*
 that book-ACC read-SIM.CVB look-IMP
 ‘Attempt to read that book.’

vi) benefactive (V₁-mi + V₂ ‘give’)

4-60) **nuani mindu uti kuniga-wa taŋi-mi buu-ə-ni.*
 (s)he I.DAT that book-ACC read-SIM.CVB give-PTCP.PST-3SG
 ‘(S)he read that book for me.’

4-61) **mindu uti kuniga-wa taŋi-mi buu-jə.*
 I.DAT that book-ACC read-SIM.CVB see-IMP
 ‘Read that book for me.’

vii) perfective (V₁-mi + V₂ ‘put’)

4-62) **nuani uti kuniga-wa taŋi-mi nədə-ə-ni.*
 (s)he that book-ACC read-SIM.CVB put-PTCP.PST-3SG
 ‘(S)he has read that book.’

4-63) **əinəŋi uti kuniga-wa taŋi-mi nədə-jə.*
 today that book-ACC read-SIM.CVB put-IMP
 ‘Finish reading that book today’

4.3.4.2. Tungusic

In 4.3.4.2, making references to previous studies and textual data, I examine auxiliary verb structure using the converbal ending **-mi* in all Tungusic languages with same standards in use.

4.3.4.2.1. Inceptive (V_1 -*mi* + V_2 ‘start’) and completive (V_1 -*mi* + V_2 ‘finish or end’)

As shown in (4-67)-(4-73), the verb ‘start’ in East and South Tungusic analytically connects with the converbal ending **-mi* to convey the inceptive aspect. However, there is no example of the corresponding verb in Evenki, Even, and Negidal, combined with the **-mi* to denote the inceptive meaning of this aspect. Instead, these Tungusic languages in the northern Russian region dominantly use the inceptive aspect suffix *-l* for the same semantic function, as indicated in (4-64), (4-65), and (4-66). Note that the *-l* is universally attested in North and East Tungusic languages, whereas it is not existent in South Tungusic (cf. Table 4-4). This represents that there are two ways of expressing inceptive aspect, either synthetic or analytic, in East Tungusic²⁴. In sum, as illustrated in Table 4-4, Tungusic can be classified into three types relying on the syntactic characteristics of inceptive aspect expressions, namely (i) North Tungusic (synthetic inceptive), (ii) East Tungusic (either synthetic or analytic inceptive), and (iii) South Tungusic (analytic inceptive). As for completive auxiliary verb, the converbal form **-mi* in most of Tungusic colligates with either the verb *ətə-* or *waj̥i-* ‘finish or end’ to convey the completive aspect, as in (4-74) to (4-83). Apart from the inceptive element *-l*, there is no overt marker for a completive aspect in the Tungusic languages.

Table 4-4. Inceptive and completive auxiliary verb structures by the Tungusic converb in **-mi*

	North				East				South			
	Ek	E	N	Ol	Nn	Oc	Ut	U	S	Hz	M	Sb
INC.AUX	-	-	-	+	+	+	+	+	+	+	+	+
INC.suffix	+	+	+	+	+	+	+	+	-	-	-	-
CMP.AUX	+	+	+	+	+	+	+	+	+	+	+	+
CMP.suffix	-	-	-	-	-	-	-	-	-	-	-	-

inceptive (V_1 -*mi* + V_2 ‘start’)

• Evenki (I)

4-64) *kunakaan soot soŋo-l-lo-n.*

child very cry-INC-N.FUT-3SG

‘The child started to cry hard.’

(Bulatova and Grenoble 1999: 31)

²⁴ From the perspective of frequency, inceptive aspect in East Tungusic is mostly expressed by the synthetic element *-l* compared to the auxiliary verb structure.

• **Even (I)**

- 4-65) *haan dəətlə-wur tət-tijur dæg-ə-l-čə-l.*
 other wing-REF.PL put.on-ANT.CVB fly-E-INC-PTCP.PST-PL
 ‘Putting on their wings, the others stated to fly away.’

(B. Pakendorf fielddata)

• **Negidal (I)**

- 4-66) *taj bitəxə-wə baxal-čə-dükka-j, ümü-l-ča.*
 that letter-ACC obtain-PTCP.PST-ABL-REF.SG drink-INC-PTCP.PST.3
 ‘Having obtained that letter, [she] started to drink (alcohol).’

(Kazama 2002: 48)

• **Nanay (III)**

- 4-67) *mapa xukču-gu-mi dəru-xə-ni.*
 bear attack-REP-SIM.CVB start-PTCP.PST-3SG
 ‘The bear started to attack again.’

(Avrorin 1981: 90)

• **Uilta (III)**

- 4-68) *andu-mi dərrouli-xə-ni.*
 make-SIM.CVB start-PTCP.PST-3SG
 ‘[He] started to make [sth].’

(Ikegami 1997: 46)

• **Orochi (II)**

- 4-69) *biti mijə bölan’i əwigi-mi dəru-ǰəŋə-pi.*
 we.INCL December? celebrate-SIM.CVB start-PTCP.FUT-1PL.INCL
 ‘We will begin to celebrate at December.’

(Avrorin and Boldyrev 2001: 366)

• **Solon (I)**

- 4-70) *bü xoniŋba=l ǰaəŋ-dixi xajšila-m əəkə-ø-müŋ.*
 we.EXC sheep.ACC=CLT ten-ABL shear-IMPF.CVB start-IMPF-1PL.EXC
 ‘We start to shear wool from sheep from 10th of the month.’

(Chaoke 1995: 240)

• **Hezhen (II)**

- 4-71) *təni xəsü-mi odi-mi=du,*
 just say-IMPF.CVB become-IMPF.CVB=CLT

sagədi ədin ədinə-mi dəriu-xə-n.
 strong wind blow-IMPF.CVB start-PTCP.PST-3

‘As soon as he finished praying, a strong wind begins to blow.’

(Tamura 2008 : 46)

• **Manchu (IV)**

4-72) *nikan wailan bə daila-mə dəribu-hə.*
 Nikan Wailan ACC attack-IMPF.CVB start-PTCP.PST

‘[They] started to attack Nikan Wailan.’

(Sung 1968 : 81)

• **Sibe (IV)**

4-73) *tə siwərakələ arə-mə djuriwə-mi.*
 now Siwereke make-IMPF.CVB start-IMPF

‘Now [we] start to make Siwereke (=Sibe bread).’

(Jyashun 2014: 202)

completive (V₁-mi + V₂ ‘finish or end’)

• **Evenki (I)**

4-74) *nunartyn atadə-rə-ø taŋdja-mii.*
 they finish-N.FUT-3PL read-COND.CVB

‘They finished reading.’

(Boldyrev 1994: 165)

• **Negidal (I)**

4-75) *xujuw-mi atəjəə^a-n.*
 cook-COND.CVB finish.N.FUT-3SG

‘[He] finished cooking.’

(Pevnov and Khasanova 2003: 140)

• **Ulcha (III)**

4-76) *gaar sama-nr məu-mi xodr-xa-ni.*
 crow shaman-3SG dance-SIM.CVB finish-PTCP.PST-3SG

‘Crow shaman finished dancing.’

(Kazama 2010c: 56)

• **Nanay (III)**

4-77) *tui u-mi songo-mi xoji-xa-ni.*
 that say-SIM.CVB cry-SIM.CVB finish-PTCP.PST-3SG

‘Saying that, [he] stopped crying.’

(Kazama 2001: 286)

• **Uilta (III)**

4-78) *dööri-məri xoji-ga-či=ndaa.*

move-SIM.CVB.PL finish-PTCP.PST-3PL=CLT

‘[They] say that they finished moving [the meat of deer].’

(Ikegami 2002b: 89)

• **Orochi (II)**

4-79) *jiimi bii xitə-wi soŋo-mi odi-xa-ni?*

why I child-1SG cry-SIM.CVB finish-PTCP.PST-3SG

‘Why did my children stop crying?’

(Kazama 1996b: 100)

• **Solon (I)**

4-80) *taččilši əši oo-jir jəəməwi oo-m ətə-sə gi?*

they now do-PTCP.PRS thing do-IMPF.CVB finish-PTCP.PST Q

‘Do they finish what they do now?.’

(Chaoke 1995: 97)

• **Hezhen (II)**

4-81) *xəsu-mi odi-mi=du, gulənə-xə-ni.*

say-IMPF.CVB finish-IMPF.CVB=CLT depart-PTCP.PST-3SG

‘As soon as [he] finished saying, [he] departed.’

(Tamura 2008: 51)

• **Manchu (IV)**

4-82) *gəmu əfulə-mə waji-ha manggi.*

everything destroy-IMPF.CVB finish-PTCP.PFV after

‘After finishing destroying everything.’

(Sung 1968 : 78)

• **Sibe (IV)**

4-83) *uwa iŋyalə-mə wajə-Xəi.*

flour knead-IMPF.CVB finish-PFV

‘[We] finished kneading flour.’

(Jyashun 2014: 202)

4.3.4.2.2. Capable (V_1 -*mi* + V_2 ‘can’)

As Table 4-5 shows, the converbal ending **-mi* in all Tungusic languages is used to form capable-related auxiliary verb construction. Nonetheless, there are distinctions in auxiliary verb types for capable-related auxiliary verb structure among the Tungusic languages. For instance, the **-mi* in Evenki (4-84) and Negidal (4-85), in Northern Russian region, can commonly unite with negative auxiliary verb **alba-* ‘unable’ to create negative capable modality. On the contrary, the East and South Tungusic languages except Uilta (4-86) do not have such a negative capable auxiliary verb structure, although phonologically corresponding words are available in these languages. According to comparative lexical study of Tungusic by Cincius et al. (1975, 1977), **alba-* is employed as a negative capable auxiliary verb in Evenki, Even, Negidal, and Uilta only (cf. Table 4-6), whereas corresponding words in other Tungusic languages generally signify ‘public or state affairs’.

Table 4-5. Capable auxiliary verb structure with the use of the Tungusic converb in **-mi*

		<i>*alba-</i> ‘unable’	<i>*mutə-</i> ‘able’	<i>*ulxi-</i> ‘understand’	<i>*baka-</i> ‘obtain’ or <i>*bahana-</i> ‘know’	<i>*o-</i> ‘become’	total
N.T.	Ek (I)	+	-	-	-	-	1
	E (I)	+	-	-	-	-	1
E.T.	N (I)	+	-	-	-	-	1
	Ol (III)	-	+	?	-	-	1
	Nn (III)	-	+	+	-	-	2
	Oc (II)	-	+	-	-	-	1
	Ut (III)	+	-	+	-	-	2
	U (II)	-	+	-	-	-	1
	S (I)	-	-	-	+	+	2
S.T.	Hz (II)	-	+	+	+	-	3
	M (IV)	-	+	-	+	-	2
	Sb (IV)	-	+	-	+	+	3

Table 4-6. Existence of negative capable meaning by **alba-* in Tungusic (Based on Cincius et al. 1975, 1977: 30)

North				East				South			
Ek	E	N	Ol	Nn	Oc	Ut	U	S	Hz	M	Sb
+	+	+	-	-	-	+	-	-	-	-	-

In addition, the converb in **-mi* in East and South Tungusic, contrary to North Tungusic, is generally characterized as a constituent to combine with the ability-related capable auxiliary verbs **mutə-* ‘able’ and/or **ulxi-* ‘understand’, as illustrated in Table 4-5 and examples (4-87)-(4-91), (4-94), (4-95), (4-97), (4-100). In South Tungusic, furthermore, another type of verbs, e.g., **baka-* ‘obtain’ ((4-92) and (4-96)) **bahana-* ‘know’ ((4-99), (4-101)), and **o-* ‘become’ ((4-93), (4-102))²⁵, is used to form possible or able auxiliary verb structures in combination with the converbal form **-mi*, unlike East Tungusic. In a nutshell, we can judge that capable-related auxiliary verb constructions with the use of the converbal suffix **-mi* are commonly confirmed in the entire family of Tungusic languages, but the types of auxiliary verbs for the capable modality vary remarkably according to areal position of the Tungusic languages.

Negative capable auxiliary verb

• Evenki (I)

4-84) *bii tokki-wa taala-duu alba-m alaat-ča-mii.*
 I moose-ACC salt.lick-DAT be.unable-1SG wait-IMPF-COND.CVB
 ‘I could not wait for the moose at that salt lick.’

(Bulatova and Grenoble 1999: 39)

• Negidal (I)

4-85) *moo-la tuktitčə-mi alba-ča-w.*
 tree-LOC climb-COND.CVB be.unable-PTCP.PST-1SG
 ‘I could not climb the tree.’

(Pevnov and Khasanova 2003: 111)

²⁵ As found in (4-98), the verb *o-* ‘become’ in Manchu combines with the conditional converb in *-či* to denote possible auxiliary verb structure, which is different from Sibe.

• Uilta (III)

- 4-86) *gəɫə-du-mi* *alba-xa-mbi*.
 seek-REP-SIM.CVB be.unable-PTCP.PST-1SG
 ‘[I] could not seek [it].’

(Ikegami 2002b: 119)

Positive-capable auxiliary verb

• Ulcha (III)

- 4-87) *buə=lə* *ŋənə-mi* *mutə-wəsi*.
 we.EXC=CLT go-SIM.CVB be.able-NEG.PTCP
 ‘We cannot go.’

(Kazama 2008c: 140)

• Nanay (III)

- 4-88) *xoonɪ=daa* *ʃapa-mɪ* *mutə-əsi*.
 how=CLT take-SIM.CVB be.able-NEG.PTCP
 ‘One cannot take [it] no matter what.’

(Kazama 2010b: 139)

- 4-89) *njoani=ragdaa* *xupi-mi* *otoli-i* *bi-či-ni=goani*.
 (s)he=CLT play-SIM.CVB understand-PTCP.PRS be-PTCP.PST-3SG=CLT
 ‘Only he could play [the instrument].’

(Kazama 2010b: 90)

• Orochi (II)

- 4-90) *təi* *ʃolo-wo* *n’ii=dəə* *uji-məi* *ə-či-ti* *mutə-ə*.
 that stone-ACC who=CLT lift.up-SIM.CVB.PL NEG-PTCP.PST-3PL be.able-PTCP
 ‘No one could lift up that stone.’

(Avrorin and Boldyrev 2001: 197)

• Uilta (III)

- 4-91) *xai-wa=daa* *andu-mi* *utulli-i-ni*.
 what-ACC=CLT make-SIM.CVB understand-PTCP.PRS-3SG
 ‘[He] can make anything.’

(Ikegami 1997: 222)

• Solon (II)

- 4-92) *bilxu-wə-n* *gəntəxən* *bodo-m* *bax-sa* *gunən*.
 mirror-ACC-3SG suddenly think-IMPF.CVB obtain-PTCP.PST say.IMPF.3
 ‘They say that [she] suddenly could think of that mirror.’

(Kazama 2007c : 56)

- 4-93) *sindu buu-mi ə-si-n oo-do.*
 2SG.DAT give-IMPF.CVB NEG-PTCP.PST-3SG become-PTCP
 ‘He could not give [it] to you.’

(Kazama 2007c : 78)

• **Hezhen (II)**

- 4-94) *əmə nio=də kutə-mi mətə-ršə-n.*
 one person=CLT steer-IMPF.CVB be.able-PTCP.NEG-3SG
 ‘Even one person cannot steer [it].’

(Tamura 2008 : 47)

- 4-95) *bi morin-mə yalu-m ulxi-ji.*
 I horse-ACC ride-IMPF.CVB understand-PTCP.N.PST.1SG
 ‘I can ride on a horse.’

(Li 2006: 108)

- 4-96) *əsi surgi dou jəfu-m baka-ušən.*
 now vegetable even eat-IMPF.CVB obtain-IMPRS.NEG
 ‘One cannot eat even vegetable now.’

(Li 2014b: 120)

• **Manchu (IV)**

- 4-97) *duka bə fitai dasi-či, ainaha niyalma dosi-mə mutə-mbi.*
 door ACC hard close-COND.CVB which person enter-IMPF.CVB be.able-IMPF
 ‘If [one] closes hard the door, can anyone enter?’

(Tsumagari 2002: 83)

- 4-98) *han i gisun bə mara-či o-mbi=o.*
 emperor GEN word ACC defy-COND.CVB become-IMPF=Q
 ‘Can [anyone] defy the emperor’s word?.’

(Tsumagari 2002: 83)

- 4-99) *bi nurə omə-mə bahana-rakū.*
 I wine drink-IMPF.CVB know-PTCP.IMPF.NEG
 ‘I cannot drink wine.’

(Gorelova 2002: 271)

• **Sibe (IV)**

- 4-100) *bi Gulja-də əmsaqə gənə-mə mutu-mi.*
 I Georgia-DAT alone go-IMPF.CVB be.able-IMPF
 ‘I can go to Georgia by myself.’

(Kubo et al. 2011: 88)

4-101) *učun učulu-m baχənə-m, bəylə-m baχənə-m.*
sing sing-IMPF.CVB know-IMPF dance-IMPF.CVB know-IMPF
‘[He] can sing and dance’

(Zikmundová 2013: 165)

4-102) *məs gələ-maq banǰə-m o-m na?*
we.INCL fear-ANT.CVB live-IMPF.CVB become-IMPF Q
‘How can we live in fear?’

(Zikmundová 2013: 165)

4.3.4.2.3. Progressive (V_1 -*mi* + V_2 ‘be’)

The progressive aspect, created by the syntactic combination of the converbal ending **-mi* and copular verb *bi-*, occurs in East and South Tungusic languages, as given in (4-106)-(4-110) and (4-112)-(4-114). In contrast, the author cannot find any corresponding auxiliary verb construction in Evenki, Even, and Negidal. Instead, the imperfective or progressive suffix **-d-~-j-* in these Tungusic languages is synthetically utilized to convey the same progressive effect, as shown in (4-103), (4-104), and (4-105). Note that Solon in the Chinese region, one of the first group of Tungusic languages, also retains this progressive aspect marker, as found (4-111), which indicates that there are two ways, i.e., either synthetic or analytical, to express progressive meaning in Solon.

• Evenki (I)

4-103) *bəjə agi-tki girku-ǰa-ǰa-n.*
man forest-LOC go-IMPF(PROG)-FUT-3SG
‘The man will be going to the forest.’

(Nedjalkov, I. V. 1997: 247)

• Even (I)

4-104) *Omčəni namnı-d-da-n.*
Emcheni gallop-PROG-N.FUT-3SG
‘Emcheni is running very fast.’

(B. Pakendorf fielddata)

• **Negidal (I)**

4-105) *ǰəb-ǰə-ji-du-n.*

eat-PROG-PTCP.PRS-DAT-3SG

‘When he was eating.’

(Kazama 2002: 126)

• **Ulcha (III)**

4-106) *jaüjü-maari jaüjü-maari bi-či-ti, əkə-səl patala-sal.*

sing-SIM.CVB sing-SIM.CVB be-PTCP.PST-3PL girl-PL beautiful-PL

‘Beautiful girls were singing.’

(Kazama 2006c: 131)

• **Nanay (III)**

4-107) *xai ta-mi bi-i-si?*

what do-SIM.CVB be-PTCP.PRS-2SG

‘What are [you] doing?’

(Kazama 2008b: 89)

• **Orochi (II)**

4-108) *bii xogo-wo waa-mi bi-či-ni.*

I seal-ACC kill-SIM.CVB be-PTCP.PST-3SG

‘I was hunting a seal.’

(Avrorin and Boldyrev 2001: 365)

• **Uilta (III)**

4-109) *tuwə xurigači-mi bi-čči-ni.*

winter do.ainu.bear.festival-SIM.CVB be-PTCP.PST-3SG

‘In winter, [he] was doing Ainu bear festival.’

(Ikegami 2002b: 23)

• **Solon (I)**

4-110) *əmun xuudee timsə-ldii-m bi-si-n gunən.*

one sack.ACC take.by.force-RECP-IMP.F.CVB be-PTCP.PST-3 say.IMP.F.3

‘They say that [a group of people] were taking a sack by force.’

(Kazama 2007d: 84)

4-111) *ünaaǰi=kkı ǰınǰı-ǰı-ra-n gunən.*

girl=CLT say-PROG-IMP.F-3 say.IMP.F.3

‘They say the girl is saying.’

(Kazama 2008d: 19)

• **Hezhen (II)**

- 4-112) *su arki-wə omi-mi bi-ji-su?*
 2PL.NOM liquor-ACC drink-IMP.F.CVB be-PTCP.N.PST-2PL
 ‘Are you drinking a liquor?’

(Li 2006: 58)

• **Manchu (IV)**

- 4-113) *hūwang joo ba bə tuwakija-mə bi-hə sə-mə ala-mbi.*
 Hwangcaoba ACC watch-IMP.F.CVB be-PTCP.PFV say-IMP.F.CVB say-IMP.F
 ‘[They] say that [they] were watching over Hwangcaoba.’

(Choi et al. 2012b: 111)

• **Sibe (IV)**

- 4-114) ~ *banji-xə ba-wə-ni učulə-mə bi-xəi.*
 live-PTCP.PFV place-ACC-3SG sing-IMP.F.CVB be-PFV
 ‘[They] were singing about the place where they lived.’

(Kogura 2007: 156)

4.3.4.2.4. Attemptive (V_1 -mi + V_2 ‘look’)

South Tungusic languages (Solon, Hezhen, Manchu, and Sibe) have in common that the attemptive auxiliary verb structure is formed by the analytical complex of the converbal ending **-mi* and verb ‘look’, as exemplified in the following examples (4-115), (4-116), (4-117), and (4-118). Still, it needs to be mentioned that the attemptive auxiliary verb structure with the *-mi* in Hezhen, as confirmed in (4-116), is shortened as a grammatical suffix *-mčič-* (< **-mi* + *ič-*: SIM.CVB + look), as a result of further grammaticalization²⁶. However, such an attemptive auxiliary verb structure is not identified in North and East Tungusic languages.

• **Solon (I)**

- 4-115) *jəgə-wə-n təgtəri-m ič-čəə gunən.*
 chin-ACC-3 stroke-IMP.F.CVB see-PTCP.PST say-IMP.F.3
 ‘[They] say that [he] tried to stroke his chin.’

(Kazama 2008d: 49)

²⁶ Note that the attemptive auxiliary verb structure is verified only in the Hezhen text by Tamura, whereas the same syntactic structure is not seen in Li (2006, 2011, 2012, 2013, 2014a, 2015).

• **Hezhen (II)**

- 4-116) *bi ədin-mə ɡələ-m-ičĭə-ø-mi.*
 I wind-ACC seek-IMPF.CVB-see-IMPF-1SG
 ‘I try to seek wind.’

(Tamura 2008: 46)

• **Manchu (IV)**

- 4-117) *siyanseng ləolə-mə tuwa-ø.*
 teacher think-IMPF.CVB see-IMP
 ‘Teacher, try to think.’

(Sung 1968: 78)

• **Sibe (IV)**

- 4-118) *əmdan ta-m ta-ø.*
 once look-IMPF.CVB look-IMP
 ‘Just have a look’

(Zikmundová 2013: 167)

4.3.4.2.5. Benefactive (V_1 -*mi* + V_2 ‘give’) and perfective (V_1 -*mi* + V_2 ‘put’)

As illustrated in (4-119)-(4-121), benefactive auxiliary verb construction, analytically consisting of the converbal ending **-mi* and verb ‘give’, is restricted to three South Tungusic languages: Solon, Manchu, and Sibe. With regard to perfective auxiliary verb structure, the *-mə* in Manchu and Sibe is identified to constitute a perfective aspect of auxiliary verb construction in combination with verb *sinda-* (*səNda-*) ‘put’²⁷. Refer to examples (4-122) and (4-123). Nonetheless, these types of auxiliary verb structure, neither benefactive nor perfective, are not attested in the **-mi* converb of North and East Tungusic.

²⁷ Perfective auxiliary verb structure in Solon, employing verb *nəə-* ‘put’ as an auxiliary verb, is not created by the imperfective converb with *-mi* but by the anterior converb in *-čĭi*. In addition, the verb *ga-* ‘take’, analytically combining with the converb with *-mi*, can be used as an perfective-like auxiliary verb as well (cf. Kazama 2011b).

benefactive (V₁-mi + V₂ ‘give’)

• **Solon (I)**

- 4-119) *aggu sibbaa-m buu-sə gunən.*
wisdom give-IMPF.CVB give-PTCP.PST say.IMPF.3
‘[They] say that [she] gave wisdom [for me].’

(Kazama 2008d: 21)

• **Manchu (IV)**

- 4-120) *haha-i jaka bə haha də faksala-mə bu-fi ungg-i-ø.*
man-GEN thing ACC man DAT divide-IMPF.CVB give-ANT.CVB send-IMP
‘Give this man his share and see him off.’

(Sung 1968: 79)

• **Sibe (IV)**

- 4-121) *jai əmdan ji-mə,*
next time come-CVB
sin-č far-χ əwən ara-m bu-ki.
2SG-DIR heave-PTCP.PFV bread make-IMPF.CVB give-OPT.1
‘Next time when you come, I want to make a Sibe bread for you’

(Zikmundová 2013: 166)

perfective (V₁-mi + V₂ ‘put’)

• **Manchu (IV)**

- 4-122) *gəmu saikan boo-də dosim-bu-mə sinda-ø.*
all well house-DAT enter-CAUS-IMPF.CVB put-IMP
‘Let them all enter the house.’

(Choi et al. 2012a: 403)

• **Sibe (IV)**

- 4-123) *niməŋə iji-mə waǰə-Xə aməla,*
cooking.oil spread-CVB finish-PTCP.PFV after
fəksə wəNkə-mə səNda-mi²⁸.
bowl cover-IMPF.CVB put-IMPF
‘After finishing spreading a cooking oil [around the dough], [we] cover a bowl over it.’

(Jyashun 2014: 203)

²⁸ Note that Kubo et al. (2011) and Zikmundová (2013) state that the verb *səNda*- ‘put’ generally combines with the anterior converb in *-maq* to constitute the perfective auxiliary verb construction.

4.3.4.2.6. Summary

The outcomes from the application of the seven parameters of auxiliary verb structures to the converbal ending **-mi* in all Tungusic languages are represented in Table 4-7.

Table 4-7. Auxiliary verb structures with the Tungusic converb in **-mi*

		CAP											total
		INC 'start'	CMP 'finish or end'	<i>*alba-</i> 'unable'	<i>*mutə-</i> 'able'	<i>*ulxi-</i> 'understand'	<i>*baka-</i> 'obtain' or <i>*bahana-</i> 'know'	<i>*o-</i> 'become'	PROG 'be'	ATT 'look'	BEN 'give'	PFV 'put'	
N.T.	Ek (I)	-	+	+	-	-	-	-	-	-	-	-	2
	E (I)	-	+	+	-	-	-	-	-	-	-	-	2
E.T.	N (I)	-	+	+	-	-	-	-	-	-	-	-	2
	Ol (III)	+	+	-	+	?	-	-	+	-	-	-	4
	Nn (III)	+	+	-	+	+	-	-	+	-	-	-	5
	Oc (II)	+	+	-	+	-	-	-	+	-	-	-	4
	Ut (III)	+	+	+	-	+	-	-	+	-	-	-	5
	U (II)	+	+	-	+	-	-	-	+	-	-	-	4
	S (I)	+	+	-	-	-	+	+	+	+	+	-	7
S.T.	Hz (II)	+	+	-	+	+	+	-	+	+	-	-	7
	M (IV)	+	+	-	+	-	+	-	+	+	+	+	8
	S (IV)	+	+	-	+	-	+	+	+	+	+	?	8

First of all, the **-mi* forms in North (Evenki, Even) and northern East Tungusic (Negidal) are limited to completive and negative-capable (**alba-* 'unable') auxiliary verb structures. In contrast, auxiliary verb structures in South Tungusic, either inceptive, completive, and positive-capable (**mutə-* 'able', **ulxi-* 'understand', **baka-* 'obtain' or **bahana-* 'know', **o-* 'become') or progressive, attemptive, benefactive, and perfective, are analytically formed by the converb in **-mi* and auxiliary verb despite more or less differences among languages within same area. Concerning East Tungusic, the converbal ending **-mi* is different from North Tungusic in that it can be generally employed in

inceptive, positive-capable (**mutā*- ‘able’, **ulxi*-‘understand’), and progressive auxiliary verb constructions. In other words, East Tungusic maintains in-between features of North and South Tungusic in terms of the use of auxiliary verb types for the capable-related modality and development of auxiliary verb structures with the converb in **-mi*. In summary, the capable-related auxiliary verb types, analytically connected with the converb in **-mi*, show variations in accordance with geographical distribution of Tungusic. In addition, the development level of auxiliary verb constructions with the **-mi* in Tungusic gradually increases on the basis of areal position from North Tungusic to South Tungusic respectively, as confirmed in Table 4-7.

4.3.4.3. Neighboring languages

Following the observations on auxiliary verb structures with the use of the Tungusic converbal ending **-mi*, I examine auxiliary verb structures with syntactic combination of imperfective converbs and auxiliary verbs in the neighboring languages (Kolima Yukaghir, Sakha, Russian, Mongolic (Buryat, Dagur, and Khalkha)). For the parameter of auxiliary verb structure, Chinese is included in discussion as well.

4.3.4.3.1. Kolima Yukaghir, Sakha, and Russian

As shown in (4-124), the imperfective converbal suffix *-t* in Kolima Yukaghir analytically combines with verb *čemie*- ‘stop or finish’ to express a completive auxiliary verb structure, whereas other auxiliary verb constructions are not identified²⁹. With respect to Sakha, the imperfective converb in *-A*, preceding the verb *sur*- ‘be’, can form progressive auxiliary verb structures (See (4-125)). With regard to other auxiliary verbs, the anterior converb in *-An* is taken to constitute inceptive (4-126), completive (4-127), and attemptive (4-128) auxiliary verb structures. In Russian, on the contrary, the imperfective gerund in *-ja* never occurs in auxiliary verb construction.

²⁹ As far as inceptive and progressive aspects in Kolima Yukaghir are concerned, the following synthetic elements, i.e., ingressive *-Ē*-, imperfective *-nu*-, are employed to convey the relevant aspect function, respectively (based on Maslova 2003).

Kolima Yukaghir

· completive

- 4-124) *lebejdii šaqal'e-š-u-t čemie-čül'i.*
berries gather-CAUS-E-IMPF.CVB finish-PFV.INTR.1PL
'We finished gathering berries.'

(Maslova 2003: 413)

Sakha

· progressive

- 4-125) *kül-e surrut*
laugh-IMPF.CVB be
'be laughing.'

(Ebata and Popova 2006: 64)

anterior converbal ending -(A)n

· inceptive

- 4-126) *ahaa-n er*
eat-ANT.CVB begin
'begin to eat.'

(Ebata and Popova 2006: 63)

· completive

- 4-127) *aar-an büt*
read-ANT.CVB finish
'finish reading.'

(Ebata and Popova 2006: 63)

· attemptive

- 4-128) *ket-en kör*
wear-ANT.CVB look
'try to wear.'

(Ebata and Popova 2006: 63)

4.3.4.3.2. Mongolic

The imperfective converbal endings **-ju* in adjacent Mongolic languages (Buryat, Dagur, and Khalkha) create a high degree of auxiliary verb constructions, since they are equally used to form six (inceptive, completive, capable (both positive and negative³⁰), progressive, attemptive, and benefactive) out of seven auxiliary verb constructions in

³⁰ Observe that there is no negative capable auxiliary verb structure confirmed in Dagur because the corresponding verb *jad-* in Dagur is used to indicate a different meaning—'fear, be embarrassed'.

this study (cf. (4-129)-(4-152))³¹. Concerning capable-related auxiliary verb structure, verbs, i.e., *jad-* ‘unable’, *čad-* ‘able’, *bol-* ‘become’, are generally connected by the imperfective converb in Mongolic, displaying gradual similarities with capable auxiliary verb types (e.g., *alba-* ‘unable’, *mutə-* ‘able’, *o-* ‘become’) in North, East, and South Tungusic in geographical order. This indicates that the **-ju* in the adjacent Mongolic languages is revealed to be most similar to the function of the converbal ending **-mi* in South Tungusic in terms of auxiliary verb structures.

Buryat

· inceptive: V1-*ǰA* + V2 ‘start’

4-129) *Bata exə xüsə-təj bari-lda-ǰa əxiləə.*
 Bata great strength-COM fight-RECP-IMPF.CVB start.PST
 ‘Bata started to fight with a great strength.’

(Barannikova et al. 1993: 106)

· completive: V1-*ǰA* + V2 ‘finish or end’

4-130) *bi ədeəl-ǰe duuhaa-b.*
 I eat-IMPF.CVB finish.PST-1SG
 ‘I finished eating.’

(fielddata)

· capable: V1-*ǰA* + V2 ‘can’

4-131) *əneədə-həə togtoo-ǰo jada-n baj-ba xa.*
 laughter-ABL stop-IMPF.CVB be.unable-MOD.CVB be-TERM PART
 ‘[He] could not stop his own laughing.’

(Barannikova et al. 1993: 220)

4-132) *bi argal-ǰa šada-xa-guj-b.*
 I treat-IMPF.CVB be.able-PTCP.FUT-NEG-1SG
 ‘I will not be ablt to treat [someone] well.’

(Barannikova et al. 2000: 204)

³¹ Concerning perfective auxiliary verb, different verbs *av-* ‘take’, *orxi-* ‘throw away’, other than verb ‘put’, are adopted in combination with the imperfective converb in these Mongolic languages. Note that the perfective auxiliary verb structure with *av-* ‘take’ is similar to that of Solon, as mentioned in footnote 27. Kazama (2011b) claims from this syntactic similarity that this auxiliary verb structure in Solon is possibly influenced by Mongolian.

4-133) *edi-je bol-no-ø.*

eat-IMPF.CVB become-N.PST-3SG

‘It is possible to eat.’

(Poppe 1960: 103)

· progressive: V1-*je* + V2 ‘be’

4-134) *nom unsha-ja bai-na-ø.*

book read-IMPF.CVB be-N.PST-3

‘[He] is reading a book.’

(Skrubnik 2003: 117)

· attemptive: V1-*je* + V2 ‘look’

4-135) *tii-xə xada-š, argal-ja üzə-hüü-b.*

that-PTCP.PST if-2SG treat-IMPF.CVB look-PTCP.FUT-1SG

‘If you do like that, I will try to treat [you].’

(Barannikova et al. 2000: 62)

· benefactive: V1-*je* + V2 ‘give’

4-136) *gal-ta šubuu bədar-ja asar-ja ugə-ø.*

fire-PROP bird.INDEF.ACC find-IMPF.CVB bring-IMPF.CVB give-IMP

‘Find a fire bird and bring it.’

(Barannikova et al. 1993: 184)

Dagur

· inceptive: V1-*je* + V2 ‘start’

4-137) *udiš banⁱne jookee-d gujšool-je əurkəə-sən-šəə?*

yesterday morning when-DAT work-IMPF.CVB start-PTCP.PST-2SG.Q

‘When did you start to work yesterday morning?’

(Wu 1994: 23)

· completive: V1-*je* + V2 ‘finish or end’

4-138) *warkl-aa əmsə-je barə-mlii, banⁱn-ii badaa-jaa id-tən-mi.*

clothes-REF wear-IMPF.CVB finish-CVB morning-GEN meal-REF eat-PTCP.PST-1SG

‘I had my breakfast right after I finish getting dressed.’

(Wu 1994: 23)

· capable: V1-*je* + V2 ‘can’

4-139) *ene xakur-ii bii əmsə-je ul šadə-n.*

this pants-ACC I wear-IMPF.CVB NEG be.able-N.PST

‘I probably cannot wear these pants any more.’

(Wu 1994: 26)

4-140) *əmsə-ǰ* *ul* *bolu-n.*
 wear-IMPF.CVB NEG become-N.PST
 ‘[I] cannot wear [dirty clothes].’

(Wu 1994: 26)

4-141) *bodu-ǰ* *ol-gw* *uwei-by.*
 think-IMPF.CVB become-N.PST NEG-1SG
 ‘[I] cannot remember [it].’

(Tsumagari 2003: 149)

· progressive: V1-ǰ + V2 ‘be’

4-142) *bii* *g^wanbəə* *sons-ǰ-aa-sən-mi*³².
 I radio listen-IMPF.CVB-be-PTCP.PST-1SG
 ‘I was listening to the radio.’

(Wu 1994: 23)

· attemptive: V1-ǰ + V2 ‘look’

4-143) *šii* *bodo-ǰ* *uǰ-ǰii,*
 2SG.NOM think-CVB see-IMPF.CVB
xər *tort-sn-aa* *namd* *ǰaa-raanee.*
 how decide-PTCP.PST-REF I.DAT tell-IMP
 ‘Try to think how you decide and tell me’

(Wu 1994: 26)

· benefactive: V1-ǰ + V2 ‘give’

4-144) *ted* *udiš* *oreekoo* *jamd* *šəušu* *xii-ǰ* *uk^w-sən.*
 they yesterday evening he.DAT operation make-IMPF.CVB give-PTCP.PST
 ‘They made an operatin for him yesterday evening.’

(Wu 1994: 21)

Khalkha

· inceptive: V1-ǰ + V2 ‘start’

4-145) *bi* *xool* *ide-ǰ* *exel-lee.*
 I meal eat-IMPF.CVB start-PST
 ‘I started eat a meal.’

³² Notice that the complex of imperfective converb and auxiliary verb in Dagur is contracted as progressive aspect marker -ǰAA- as a result of grammaticalization.

· completive: V1-*ǰ* + V2 ‘finish or end’

4-146) *bi xool ide-ǰ duusga-na.*

I meal eat-IMPF.CVB finish-N.PST

‘I finish eating a meal.’

· capable: V1-*ǰ* + V2 ‘can’

4-147) *Mjagmar xülee-ǰ jad-aad öröönd or-ǰ ir-lee.*

Mjagmar wait-IMPF.CVB be.unable-ANT.CVB room.DAT enter-IMPF.CVB come-PST

‘Unable to wait, Mjagmar entered the room.’

(Yamakoshi 2012: 160)

4-148) *či mor’ una-ǰ čadax uu?*

2SG.NOM horse ride-IMPF.CVB be.able.PTCP.FUT Q

‘Can you ride a horse?.’

(Yamakoshi 2012: 125)

4-149) *čingis xaan ongoč-ny buudl-aas narita ruu*

Genghis Khan airport-GEN place-ABL Narita DIR

šuuđ nis-č bol-no.

direct fly-IMPF.CVB become-N.PST

‘[One] can fly directly from Genghis Kahn airport to Narita.’

(Yamakoshi 2012: 123)

· progressive: V1-*ǰ* + V2 ‘be’

4-150) *čaanaas mor’-toj xün ir-ǰ baj-na.*

beyond.ABL horse-COM person come-IMPF.CVB be-N.PST

‘A person on a horse is coming from that side.’

(Yamakoshi 2012: 122)

· attemptive: V1-*ǰ* + V2 ‘look’

4-151) *tamxi tata-ǰ üz-ex üü?*

cigarette pull-IMPF.CVB see-PTCP.FUT Q

‘Do [you] try to smoke?’

(Yamakoshi 2012: 124)

· benefactive: V1-*ǰ* + V2 ‘give’

4-152) *Bat ene blog-ijg nadad zaa-ǰ ög-sön.*

Bat this blog-ACC I.DAT show-IMPF.CVB give-PTCP.PST

‘Bat showed this blog to me.’

(Yamakoshi 2012: 124)

4.3.4.3.3. Chinese

Chinese, although lacking converbs, retains various auxiliary verb constructions. As illustrated in (4-153)-(4-160), out of the seven parameters in this study, six – inceptive, completive, positive-capable, progressive, attemptive, and benefactive auxiliary verb structures – appear in Chinese³³. Concerning capable-related auxiliary verb structure, there are different types of verbs, e.g., *néng* ‘able’ (4-155), *kěyǐ* ‘possible’ (4-156), *huì* ‘know or understand’ (4-157), used for this modal function. The auxiliary verb types for capability are semantically close to those (e.g., *mutə-* ‘able’ or *ulxi-* ‘understand’ or *bahana-* ‘know’) of East and, more similarly, South Tungusic languages as well.

· inceptive: V1 + V2 ‘start’

4-153) *wǒ kāishǐ xuéxí hànyǔ.*

I start learn Chinese

‘I start to learn Chinese.’

· completive: V1 + V2 ‘finish or end’

4-154) *tā zuò wán le gōngzuò*

(s)he do finish PERF work

‘(S)he finished doing a work.’

· capable: V1 + V2 ‘can’

4-155) *wǒ néng kàn zhōngguó xiǎoshuō.*

I be.able read Chinese novel

‘I can read a Chinese novel.’

4-156) *wǒ kěyǐ chōuyān ma?*

I possible smoke Q

‘Can I smoke?’

³³ In Chinese, the verb *dào* ‘reach, arrive’, apart from the verb ‘put’, is employed in the formation of perfective auxiliary verb structure.

4-157) *wǒ huì shuō hànyǔ.*

I know speak Chinese

‘I can speak Chinese.’

· progressive: V1 + V2 ‘be’

4-158) *tā zài dǎ pīngpāngqiú*

(s)he be play table.tennis

‘(S)he is playing table tennis.’

· attemptive: V1 + V2 ‘look’

4-159) *chī chī kàn.*

eat eat look

‘Try to eat.’

· benefactive: V1 + V2 ‘give’

4-160) *tā bǎ nà běn shū sòng gěi wǒ le.*

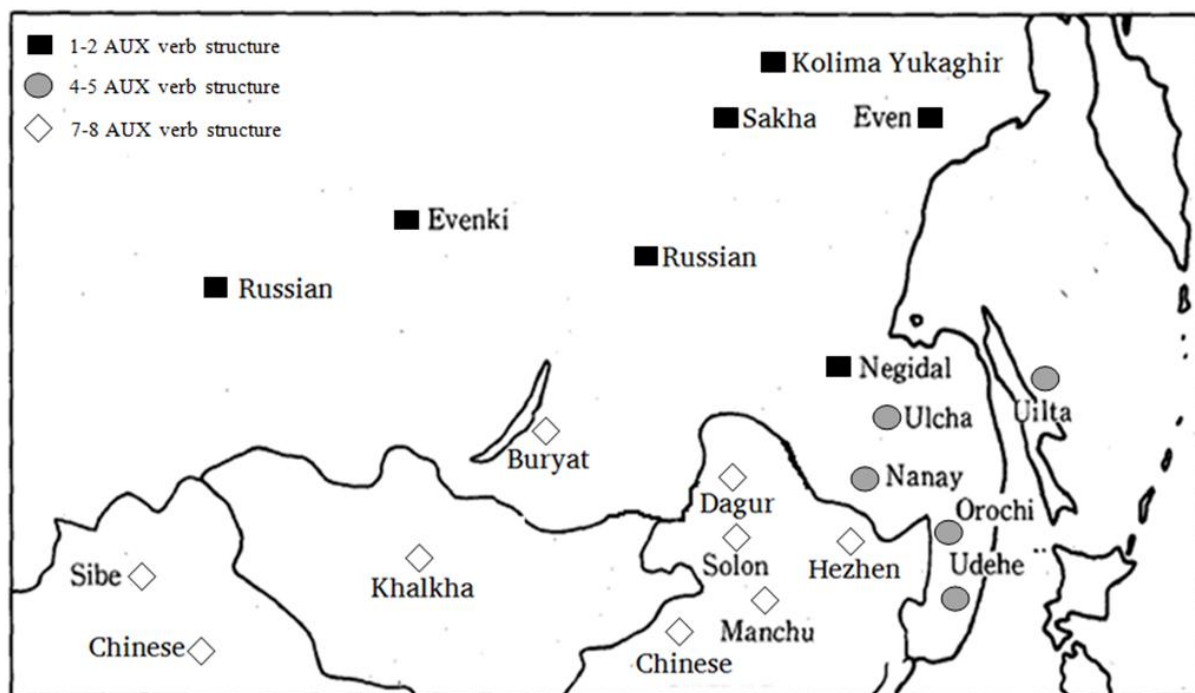
(s)he PRP that CLF book send give I PERF

‘(S)he sent that book to me.’

4.3.4.4. Summary

Having employed the seven criteria of auxiliary verb structures to the converbal ending **-mi* in Tungusic, I conclude that the development of auxiliary verb constructions with the use of the converbal form **-mi* in Tungusic gradually increases from northern to southern province, as shown in Map 4-4 below. Regarding the capable-related auxiliary verb structure, furthermore, the use of auxiliary verb types also shows areal-based variations among Tungusic. To put it concretely, the **-mi* forms in Evenki, Even, and Negidal, spoken in northern Russian, are restrictively adopted to form negative capable (**alba-* ‘unable’) and completive auxiliary verb structures. The uses of the imperfective converbs for auxiliary verb structures in the adjoined Kolima Yukaghir and Sakha are also very limited. Notice that the occurrence of negative-capable auxiliary verb is consistent with Mongolic (Buryat and Khalkha).

Map 4-4. Converbal ending **-mi* in Tungusic and imperfective converbal endings in the neighboring languages from the auxiliary verb structure perspective



On the contrary, the corresponding converbs in South Tungusic languages (Solon, Hezhen, Manchu, and Sibe) commonly have a tendency to be used to constitute either inceptive, completive, and positive-capable (**mutə-* ‘able’, **ulxi-* ‘understand’, **baka-* ‘obtain’ or **bahana-* ‘know’, **o-* ‘become’) or progressive, attemptive, benefactive, and perfective auxiliary verb constructions, showing remarkable similarities to the imperfective converbs in **-ju* in adjacent Mongolic languages (Buryat, Dagur, and Khalkha) and Chinese auxiliary verb structures. As to East Tungusic, the **-mi* can form inceptive, completive, positive-capable (**mutə-* ‘able’, **ulxi-* ‘understand’) and progressive types of auxiliary verb construction, which can be taken as the middle position among the entire Tungusic languages in the use of capable auxiliary verb types and development of auxiliary verb structure. In conclusion, the capable-related auxiliary verb types and development hierarchy of the auxiliary verb construction in combination with the converbal ending **-mi* in Tungusic display noticeable differences depending on the geographical position, classified into three patterns as follows: i) North Tungusic: negative capable (**alba-* ‘unable’) and low development, ii) East Tungusic: positive-capable (**mutə-* ‘able’, **ulxi-* ‘understand’) and middle development, and iii) South Tungusic: positive-capable (**mutə-* ‘able’, **ulxi-* ‘understand’, **baka-* ‘obtain’ or **bahana-* ‘know’, **o-* ‘become’) and high development. These variations are presumed

to be strongly associated with the different degree of influence of the neighboring Mongolic and Chinese languages.

4.3.5. Grammaticalization of speech verbs

Haspelmath (1995: 40) remarks that speech verbs in converbal form cross-linguistically function as markers of quotative or complement clause, either in verbs of utterance or in verbs of thinking and others, as a result of the grammaticalization process:

There is one converbal verb form that is grammaticalized in a large number of languages to a conjunction that occurs very frequently and have a very abstract function: the converb form “saying”. In addition to its original use as a marker of direct speech, “saying” is commonly used to mark not only complements to verbs of utterance, but also complements to verbs of thinking and others.

(Haspelmath 1995: 40)

With regard to Tungusic, Matić and Pakendorf (2013) clarify non-canonical use of speech verbs in Siberian languages from a geographical perspective, raising a possibility that the grammatical use of speech verbs in Tungusic is associated with areal-based contact. They include the converbal structure as one of the grammaticalizations of speech verbs in their discussion but they are more focused on the non-typical use of speech verbs itself. Moreover, they do not cover this phenomenon in all Tungusic languages, since they concentrate on Evenki, Even, Negidal, Nanay, Udihe, and Manchu. In this section, therefore, the following grammaticalizations of speech verbs, marking a quotative or complement clause either in verbs of speech (4-161) or in verbs of thinking or emotion (4-162), are taken as parameters to examine speech verbs in the converbal ending **-mi* in the Tungusic languages from the perspective of areal linguistics.

Ewe

4-161) *me-gblɔ* ***bé*** *me-wɔ-e*.

I-say say I-do-it

‘I said that I did it.’

(Hopper and Traugott 1993: 14)

4-162) *me-dí* *bé* *máple* *awua* *dewó.*
 I-want say I.SUBJ.buy dress some

‘I want to buy some dresses (=I want that I buy some dresses).’

(Hopper and Traugott 1993: 14)

4.3.5.1. Udihe

In Udihe, speech verbs *gunə-* or *diana-* ‘say’ plus the converbal ending *-mi*, serving as a grammatical element for an index of quotative or complement clause, is not verified from previous literature or the author’s elicitation. Instead, Nikolaeva and Tolskaya (2001) describe how the particle *gumu* (< *gunə-* + *-u*: say + PAS?) is used to introduce either a direct speech or a complement clause³⁴, as in the following examples ((4-163), (4-164), (4-165), and (4-166)).

4-163) *nuani dian-ka* *əniŋə-tigi-i* *magaĵina-tigi* *ŋənə-ĵəŋə-i* *gumu.*
 (s)he say-PST mother-DIR-REF.SG shop-DIR go-PTCP.FUT-1SG say.PAS?

‘He said to his mother: I will go to shop.’

(Nikolaeva and Tolskaya 2001: 668)

4-164) *bi abuga-i* *diana-a-ni* *inəi* *ə-ĵi* *sunĵu* *gumu.*
 I father-1SG say-PTCP.PST-3SG dog NEG-IMP tease say.PAS?

‘My father said: Don’t tease the dog.’

(Nikolaeva and Tolskaya 2001: 668)

4-165) *muisi-ø-mi* *əi* *aanta* *soŋo-i-ni* *gumu.*
 think-PRS-1SG this woman cry-PTCP.PRS-3SG say.PAS?

‘I think that this woman is crying.’

(Nikolaeva and Tolskaya 2001: 662)

4-166) *nuani* *muisi-i-ni* *uli* *təu* *xa-a-ni* *gumu.*
 (s)he think-PTCP.PRS-1SG water all boil-PTCP.PST-3SG say.PAS?

‘He thinks that all the water has boiled away.’

(Nikolaeva and Tolskaya 2001: 662)

4.3.5.2. Tungusic

Broadening the range of examinations on the grammaticalization of speech verbs plus the converbal ending **-mi* toward the entire family of Tungusic languages, I

³⁴ However, the author cannot confirm *gumu* as a complement index from Udihe consultant. This may arise from a generation gap among Udihe speakers.

summarized the results in Table 4-8. In Western Evenki and Negidal, the author cannot verify that a speech verb with *-mi* grammatically serves as a quotative or complement index. However, according to Matic' and Pakendorf (2013), the converbal ending *-nikAn* in Eastern Evenki and the converbal forms *-nikAn* or *-mi* in Western Even are employed to constitute grammaticalization of speech verbs including the marking of quotative or complement clauses. They pose a possibility that the non-canonical use of speech verbs stems from the influence of Sakha, since this kind of syntactic phenomenon is not attested in Western Evenki and Eastern Even dialects without any contact with Sakha.

On the other hand, there are serious issues with this scenario: first of all the functions of non-canonical SAY attested in the different Tungusic lects are strikingly different, as demonstrated by the results of the Correspondence Analysis, where the South Tungusic languages Nanai and Udihe are grouped separately from the North Tungusic lects W. Èven and E. Evenki. Secondly, it is noteworthy that in the North Tungusic branch non-canonical SAY is absent with the exception of those lects that are in documented close contact with Sakha: W. Èven ... and E. Evenki.

(Matic' and Pakendorf 2013: 395-396)

As for East Tungusic, the third group of Tungusic (Nanay, Ulcha, and Uilta) commonly adopts speech verbs with the converbal ending **-mi* as a grammatical element despite the inconsistency of its present forms among languages. Ulcha and Nanay use the clitic *=(A)m* as an index of quotative and/or complement clause, either in verbs of utterance or in verbs of thinking, as shown in (4-167), (4-168), (4-169), and (4-170). Avrorin (1961) speculates that the clitic *=m* in Nanay originated from the speech verb *un-*‘say’ plus the converbal ending *-mi*. On the other hand, Uilta, another language in the third group of Tungusic, retains the original form *u-mi* (say-SIM.CVB) to indicate an index of quotative clause in the verbs of uttering whose examples, although its frequency is low, are confirmed in Uilta text (See (4-171), (4-172)). However, such a grammaticalization of speech verbs in the **-mi* form is not identified in the second group of Tungusic (Udihe and Orochi). Lastly, in South Tungusic languages, a speech verb in the converbal form universally functions as a grammatical marker for either quotative or complement index in general. Nonetheless, there is a disparity in the use of converb

types among South Tungusic languages. Speech verbs with the converbal endings *-mi* and *-mə* in Hezhen and Manchu, Sibe respectively, i.e., *nə-mi*: do or say-IMPF.CVB (Hz) and *sə-mə*: say-IMPF.CVB (M), *sə-mə*: say-IMPF.CVB (Sb), are utilized to mark an index of quotative and complement, as shown in examples (4-175), (4-176), (4-177), (4-178), (4-179), and (4-180). On the other hand, Solon does not adopt a speech verb with the *-mi* ending; instead, the particle *gunkən* (< **gun-* ‘say’ plus *-nikAn* fossilized simultaneous converbal suffix) is frequently used to introduce a quotative and complement clause (see (4-173) and (4-174)), which is similar to that of Western Even and Eastern Evenki *göniken* in its structure and function.

Table 4-8. Grammaticalizations of speech verbs in the Tungusic converb in *-*mi*

		grammaticalization of speech verbs	results
N.T.	W.Ek (I)	-	-
	W.E (I)	<i>gö-nikən</i> (say-SIM.CVB) or <i>gö-mi</i> (say-COND.CVB)	+
E.T.	N (I)	-	-
	Ol (III)	= <i>(A)m</i> (clitic) (< * <i>u-mi</i> : say-SIM.CVB)	+
	Nn (III)	= <i>(A)m</i> (clitic) (< * <i>u-mi</i> : say-SIM.CVB)	+
	Oc (II)	-	-
	Ut (III)	<i>u-mi</i> (say-SIM.CVB)	+
	U (II)	<i>gumu</i> (< * <i>gunə-?</i> : say-PAS?)	-
	S (I)	<i>gunken</i> (particle) (< * <i>gun-nikAn</i> : say-SIM.CVB)	-
S.T.	Hz (II)	<i>nə-mi</i> (say-IMPF.CVB)	+
	M (IV)	<i>sə-mə</i> (say-IMPF.CVB)	+
	S (IV)	<i>sə-mə</i> (say-IMPF.CVB)	+

• East Tungusic

Ulcha (III)

4-167) *wən-dii-ni*, *baɪ wən-čim-bi=m=də*.
 say-PTCP.PRS-3SG only say-PTCP.PSG-1SG=CLT=CLT
 ‘[He] says: I just said.’

(Kazama 2010c: 144)

4-168) *tu-sal wəndi-i-ti buə xooni ɣənuwu=kəə=m=də.*
 that-PL say-PTCP.PRS-3PL we.EXC how return=CLT=CLT=CLT
 ‘They say: How do we come back?’

(Kazama 2008c: 113)

• **Nanay (III)**

4-169) *ča-do nəə-mi aja bi-ǰərəə=m un-dii-ni.*
 that-DAT put-CVB good be-FUT=CLT say-PTCP.PRS-3SG
 ‘[He] says: It will be good to put [it] there.’

(Kazama 2010b: 259)

4-170) *piktə-ji tui bao-go-orɪ=m ə-čičə murči-jə.*
 child-REF.SG thus find-REP-PRS.PTCP.IMPRS=CLT NEG-PTCP.PST think-INF
 ‘He did not think that [he] meets his child again.’

(Kazama 2010b: 259)

• **Uilta (III)**

4-171) *naa böjöm-bö-ni ~ xagǰu doo-du-ni waa-wuri manga*
 land animal-ACC-3SG bear.hole middle-DAT-3SG kill-CVB hard
u-mi təəluǰuči-xə-ni taani bəbirinai.
 say-SIM.CVB narrate-PTCP.PST-3SG that Bebirinai?
 ‘That Bebirinai narrates that it is hard to hunt that animal in the middle of bearhole.’

(Ikegami 2002b: 40-41)

4-172) *irənčəə xamačigaga u-mi panunnoč-či-ni=ndaa.*
 irence what say-SIM.CVB ask.CAUS-PTCP.PST-3SG=CLT
 ‘It is said that the king had him ask: What is irence?’

(Ikegami 2002b: 79)

• **South Tungusic**

Solon (I)

4-173) *sii iləə nənə-ø-ndi guŋkən minii əxinbəl aŋüü-saa.*
 2SG.NOM where go-PRS-2SG say.SIM.CVB I.GEN older sister ask-PTCP.PST
 ‘My sister asked: Where do you go?’

(Kazama 2011b: 164)

4-174) *kinoo isi-ø-mi guŋkən ǰoonǰi-ø-mi.*
 movie see-IMPF-1SG say.SIM.CVB think-IMPF-1SG
 ‘I think that I will watch a movie.’

(Tsumagari 2009a: 17)

Hezhen (II)

- 4-175) *əsi əmə nio=də ənə-ø-i nə-mi xəsü-ršə-n.*
now one person=CLT go-PTCP.PRS-1SG say-IMPF.CVB say-NEG.PRS-3
'Now even one person does not say: I go.'

(Tamura 2008: 51)

- 4-176) *ɛi minowə ni nə-mi saʃi-ɛi.*
2SG.NOM I.ACC who say-IMPF.CVB know.PTCP.N.PST-2SG
'Do you know who I am?'

(An 1986 : 61)

Manchu (IV)

- 4-177) *doosə gərən i baru suwə omi-mə ələ-hə=o*
monk everybody GEN toward 2PL.NOM drink-IMPF.CVB enough-PTCP.PFV=Q
sə-mə fonʃi-ha də.
say-IMPF.CVB ask-PTCP.PFV DAT
'When the monk asked everybody: Have you had enough to drink?'

(Gorelova 2002: 274)

- 4-178) *ama əmə damu nimə-rakū sə-mə ʃobo-mbi.*
father mother only get.ill-PTCP.IMPF.NEG. say-IMPF.CVB worry-IMPF
'I only worry that father and mother might get ill.'

(Gorelova 2002: 274)

Sibe (IV)

- 4-179) *tərə ji-Xə na sə-mə fyoNʃi-Xəi.*
that come-PTCP.PFV Q say-IMPF.CVB ask-PFV
'He asked: Did she come?'

(Kogura 2013: 15)

- 4-180) *bi ʃai ani gələ əba-də ʃi-kii sə-mə Goni-mahəi.*
I next year again here-DAT come-OPT.1 say-IMPF.CVB think-PROG
'I think that I want to come here next year, too.'

(Kogura 2007: 151)

4.3.5.3. Neighboring languages

As illustrated in (4-181)-(4-183), speech verbs plus the imperfective converbal endings *-t* in Kolima Yukaghir and *-A* in Sakha³⁵, individually, function as a grammatical element to mark a quotative or complement clause. In contrast, there is no such grammaticalization phenomenon with the use of the gerund suffix *-ja* in Russian.

Sakha

4-181) *olox-xo mieste-bi-n bul-lu-m dii sanuuu-gun=duo.*

life-DAT place-1SG-ACC find-PST-1SG say.IMPF.CVB think.PRS-2SG=Q

‘Do you think that you have found your position in your life?’

(Ebata 2011: 205)

4-182) *baluk sie-bit kihi bert buol-uo ebit dii*

fish eat-PTCP.PST person good become-FUT.3SG PART say.IMPF.CVB

sanaa-but sahuul.

think-PST.3SG fox

‘The fox thought that a person who ate fish would be happy’

(Ebata 2011: 206)

Kolima Yukaghir

4-183) *kin-tek qon-to-l, kin-tek pon’oo-te-l mon-u-t n’ied’i-nnu-l’el-ŋi.*

who-FOC go-FUT-SF who-FOC remain-FUT-SF say-E-IMPF.CVB talk-HAB-INFR-PL

‘They discuss who would go on and who would remain.’

(Maslova 2001: 129)

Concerning adjacent Mongolic languages (Buryat, Dagur, and Khalkha), the imperfective converbal ending **-ju* in these Mongolic languages, attached to speech verbs, commonly and frequently encodes an index of quotative and complement clause either in verbs of speech or in verbs of thinking or emotion, as (4-184)-(4-189) indicate.

³⁵ The grammatical use of saying verb in the Sakha imperfective converb with *-A* is mostly limited to the marker of complement clause.

Buryat

- 4-184) *tii-gəəd* *hüül-də-n* *namaj-g-aa* *ədeərəj* *gə-ǰə*
do.that-ANT.CVB last-DAT-3 I.ACC-E-REF eat.IMP say-IMPF.CVB
xəl-bə *xa* *daa.*
say-PST.3 PART PART
‘He said: Doing that, then eat me.’

(Barannikova et al. 2000: 58)

- 4-185) *tərə* *təbxəriima* *soo-šne* *juuma* *šərxəə-gəəd* *baj-nae*
that rectangular.thing in-2SG thing be.hairy-ANT.CVB be-N.PST
gə-ǰe *han-na-m.*
say-IMPF.CVB think-N.PST-1SG
‘I think that there is something hairy in that rectangular.’

(Barannikova et al. 2000: 148)

Dagur

- 4-186) *naməi* *ənd* *bəi* *əl-ǰ* *jam-d* *ǰaa-ø.*
me here AUX say-IMPF.CVB him-DAT tell-IMP
‘Tell him that I am here.’

(Wu 1994: 31)

- 4-187) *bii* *xər* *č* *xii-jeeš* *xudəə-d* *ič-bəi* *əl-ǰ*
I how PART do-CONC.CVB countryside-DAT go-N.PST say-IMPF.CVB
tortoo-sən-mi.
decide-PTCP.PST-1SG
‘I have already decided that I go to the countryside anyhow.’

(Wu 1994: 22)

Khalkha

- 4-188) *margaas* *arvan* *čag-t* *uulz’ja* *ge-ǰ* *jari-lč-san.*
tomorrow ten hour-DAT meet.VOL say-IMPF.CVB speak-RECP-PTCP.PST
‘[We] said: Let’s meet at ten tomorrow.’

(Yamakoshi 2012: 128)

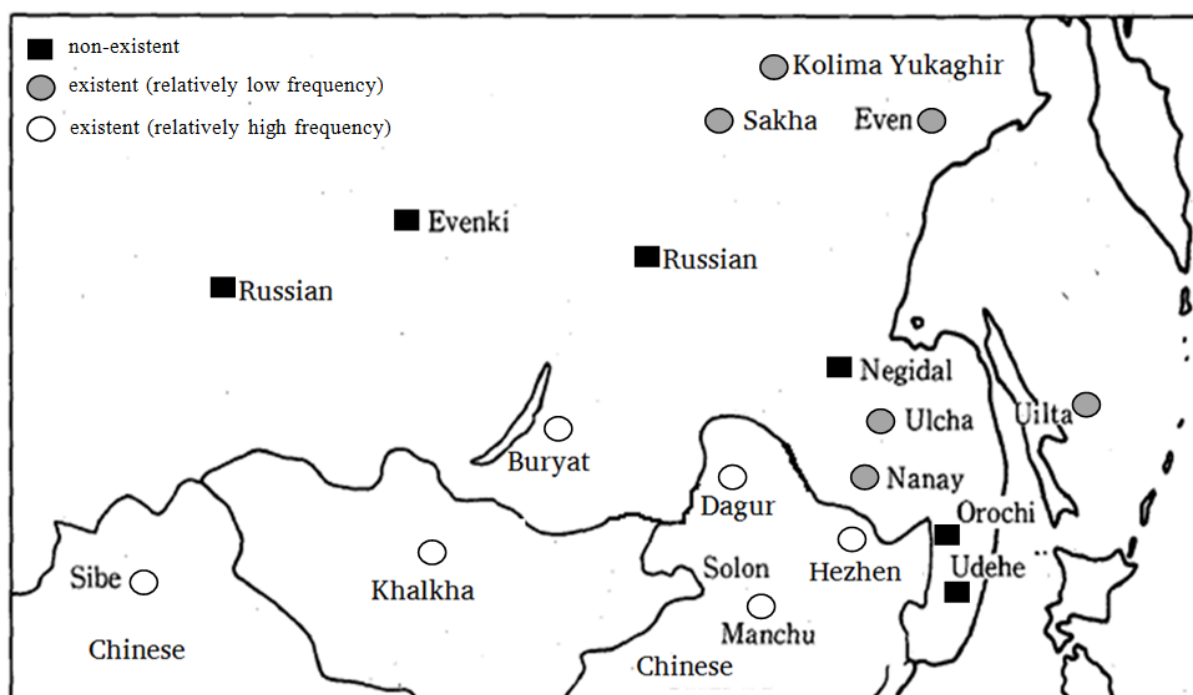
- 4-189) *bie* *čin’* *sajžir-san* *ge-ǰ* *bodo-ǰ* *baj-san.*
body 2SG get.well-PTCP.PST say-IMPF.CVB think-IMPF.CVB be-PTCP.PST
‘I think that your body got well.’

(Yamakoshi 2012: 129)

4.3.5.4. Summary

As organized in Map 4-5, the converbal form **-mi*, connected to speech verbs, is proved to grammatically function as an index of quotative or complement clause, either in verbs of utterance or in verbs of thinking or emotion, in the following Tungusic languages: Western Even, Ulcha, Nanay, Uilta, Hezhen, Manchu, and Sibe. First of all, Western Even in the northern Siberian region is known to use the converb with *-mi* to create a grammatical element of speech verb, as is the case in Sakha and Kolima Yukaghir. Matic' and Pakendorf (2013) imply a possible influence from Sakha to Western Even in this syntactic similarity in comparison with the lack of corresponding syntactic device in other North Tungusic languages.

Map 4-5. Converbal ending **-mi* in Tungusic and imperfective converbal endings in the neighboring languages from the perspective of grammaticalization of speech verbs



Secondly, the East Tungusic languages genetically classified as the third group, Ulcha, Nanay, and Uilta, equally maintain the speech verbs in the converbal ending **-mi* as a quotative and/or complement index with a relatively-low frequency. However, it should be stressed that speech verbs with the *-mi* ending in Ulcha and Nanay have contracted to the clitic *=m* as a consequence of further grammaticalization, while the speech verb in converbal structure, i.e., *u-mi* (say-SIM.CVB), remains in its original form in Uilta. On

the other hand, the corresponding grammaticalizations do not appear in the second group of Tungusic (Udihe, Orochi) according to the author's observation. In South Tungusic, in the last place, Hezhen, Manchu, and Sibe turned out to frequently adopt speech verbs with the converbal form **-mi* for a grammatical index of quotative and complement clause. Note that speech verbs in Solon combine with the **-nikAn*, fossilized simultaneous converbal form from a diachronic point of view, instead of the converb with *-mi* like Eastern Evenki. As for the neighboring Mongolic languages, Dagur, Buryat, and Khalkha, near to East and South Tungusic languages, commonly use speech verbs plus the semantically-corresponding imperfective converb in **-ju*, which serves as a marker of quotative and complement clause in verbs of speech or verbs of thinking or emotion. In conclusion, North Tungusic (Western Evenki and Negidal) do not generally reveal such a grammaticalization by say verbs in the converb **-mi*. With regard to Even, the speech verb with the converbal ending *-mi* in Western dialect, functioning as an index of quotative or complement clause, is considered to be influenced by Sakha, as discussed in the previous study. Furthermore, the combination of speech verbs and the converb in **-mi* as a grammatical index of quotative or complement clause has a tendency to converge in East and South Tungusic languages, and this syntactic feature is widely attested in the neighboring Mongolic languages. Still, there is a distinction between East and South Tungusic, in that the grammaticalization of speech verbs with **-mi* is more concentrated in Tungusic in the Chinese territories in comparison with East Tungusic, since the grammaticalization of speech verbs in **-mi* occurs with a relatively-low frequency in the third group of Tungusic and a similar syntactic phenomenon is not confirmed in the second group of Tungusic languages. Thus, the different development of grammaticalization of the speech verbs in the converbal ending **-mi* among Tungusic is presumed to be related to the influence of neighboring Sakha and Mongolic languages.

4.4. Semantic Parameters

As Figure 4-3 illustrates, Nedjalkov, V. P. (1995) typologically classifies converbs into three types by semantic functions: (i) specialized converbs, (ii) contextual converbs, and (iii) narrative converbs. Following this classification, the converbal ending **-mi* in Tungusic and the semantically-corresponding imperfective converbal endings in the contiguous languages belong to contextual converbs that can perform various semantic functions according to the context. In § 4.4, I focus on the following five semantic

functions (simultaneity, anteriority, causality, purposive, and conditional) to study the converb in **-mi* from the perspective of areal linguistics.

Figure 4-3. Typological classification of converbs by semantic types (Nedjalkov, V. P. 1995: 106-109)

- (i). *specialized converb*: have one or two meanings of the adverbial type
 - (1) temporal specialized converbs: simultaneity, anteriority, posteriority
 - (2) non-temporal specialized converbs: manner, cause, purpose, real condition, irreal condition, concession, comparison, intention, result, contrast, accompanying circumstance, etc
- (ii). *contextual converb*: have three or more adverbial meanings that are realized under certain conditions
- (iii). *narrative converb*: express a coordinative connection that advances the narration

4.4.1. Simultaneity, anteriority, and causality

The converbal ending **-mi* in all Tungusic languages generally performs multi-semantic functions such as simultaneity, anteriority, and causality, as is clear in many previous literatures (e.g., Nedjalkov, I.V. (1995), Malchukov (2008), Kazama (2010a, 2010b), and Sung (1968)). That is to say, there is no noticeable disparity of the converb with **-mi* among Tungusic within these three semantic standards. The examples of the converb with **-mi*, found in (4-190)-(4-201), are taken from Evenki (I), Udihe (II), Nanay (III), and Manchu (IV). Moreover, similar semantic functions are also identified in the imperfective converbs in most of adjoined languages (Kolima Yukaghir, Sakha, Russian, and Mongolic). Thus, I do not further examine the converbal suffix **-mi* in Tungusic and imperfective converbal endings in neighboring languages within these semantic parameters.

• Simultaneity

Evenki (I)

4-190) <i>agi-li</i>	<i>ŋənə-ǰə-mi,</i>	<i>dəŋk'ə-l-wə</i>	<i>wa-wki.</i>
forest-PROL	go-IMPF-COND.CVB	sable-PL-ACC	kill-HAB.PTCP
'Going through the forest, [he] hunts sables'			(Nedjalkov, I. V. 1995: 456)

Udihe (II)

- 4-191) *sitə-fi* *igisi-mi,* *bagdi-a-ti.*
child-REF.PL raise-SIM.CVB live-PTCP.PST-3PL
‘Raising their child, [they] lived.’

(Kazama 2010a: 223)

Nanay (III)

- 4-192) *songo-mi,* *ili-si-i-ni.*
cry-SIM.CVB stand-DUR-PTCP.PRS-3SG
‘Crying, [he] is standing.’

(Kazama 2010b: 243)

Manchu (IV)

- 4-193) *si* *morin bə* *bošo-mə,* *tuba-də* *gama-fi.*
2SG.NOM horse ACC hurry-IMPV.CVB that.place-DAT take-ANT.CVB
‘Hurrying the horse, you take [somebody] to that place and.....’

(Tsumagari 2002: 62)

• Anteriority

Evenki (I)

- 4-194) *sama-səl* *əmə-mi,* *asi-wa-n* *ičə-rə-ø.*
shaman-PL come-COND.CVB woman-ACC-3SG see-N.FUT-3PL
‘Having come, the shamans saw his wife.’

(Nedjalkov, I. V. 1995: 456)

Udihe (II)

- 4-195) *timaa* *timaa* *təə-gi-mi,* *njaa* *ŋənə-ktə-i=liə.*
morning morning get.up-REP-SIM.CVB again go-DISTR-PTCP.PRS=CLT
‘Getting up in the morning, [he] goes again.’

(Kazama 2004: 38)

Nanay (III)

- 4-196) *dəurə-mi* *jiŋu-mi,* *mapaačaan=tanii* *undii.*
walk-SIM.CVB return-SIM.CVB grandfather=CLT say.PTCP.PRS
‘Walking back, [he] says to his grandfather.’

(Kazama 2007b: 161)

Manchu (IV)

- 4-197) *musə tərə gašan də gənə-fi bələ hūlaša-mə*
 we.INCL that village DAT go-ANT.CVB rice exchange-IMPF.CVB
buda ara-mə jə-fi gənə-ki.
 cooked.rice make-IMPF.CVB eat-ANT.CVB go-OPT.1
 ‘Let’s go to that village and exchange rice and cook it and eat it.’

(Tsumagari 1981: 152)

• Causality

Evenki (I)

- 4-198) *əŋəsi bi-mi, ŋorča-mači-mu-ja-ča-n.*
 strong be-COND.CVB fight-RECP-VOL-IMPF-PTCP.PST-3SG
 ‘[He] wanted to fight with somebody because he was strong.’

(Nedjalkov, I. V. 1995: 456)

Udihe (II)

- 4-199) *nuani maŋga bi-mi,*
 (s)he strong be-SIM.CVB
uti sagdi jolo-wo uində-mi mutə-i-ni.
 that big stone-ACC lift up-CVB be.able-PTCP.PST-3SG
 ‘(S)he could lift up that big stone because he is strong.’

(fielddata)

Nanay (III)

- 4-200) *xainaa~ min-ji asila-go-iča-mi, aksa-xa-ni bi-jaṛəə.*
 perhaps I-INS marry-REP-INT-SIM.CVB get.excited-PTCP.PST-3SG be-FUT
 ‘Perhaps he will get excited because he wants to marry me.’

(Kazama 2005: 22)

Manchu (IV)

- 4-201) *uksin su-hə niyalma gəčə-mə, ambula buču-hə.*
 armor take.off-PTCP.PFV person get.freed-IMPF.CVB a.lot die-PTCP.PFV
 ‘The person who took off armor died a lot because of getting freed’

(Sung 1968: 83)

4.4.2. Purposive

As introduced in § 4.1, Benzing (1956) insists that the converbal form *-mə* in Manchu conveys a different semantic interpretation (i.e., supine or purposive) in

opposition to the **-mi* in other Tungusic languages. In 4.4.2, I reexamine the occurrence of purposive function by the **-mi* converb in Tungusic from the viewpoint of areal linguistics.

Figure 4-4. Typological parameters for purposive construction

- (i) motion purposive (English): motion verb + to-infinitive
4-202) He went to the library **to study** linguistics.

- (ii) general purposive (English): non-motion verb + to-infinitive
4-203) He has studied French **to get a job** in France.

Figure 4-4 shows that purposive constructions can be cross-linguistically classified into two types, namely (i) motion and (ii) general purposives, depending on the appearance of a motion verb in the main clause. For instance, example sentence (4-202) indicates that English makes use of a motion verb and the to-infinitive to form a motion purposive structure. Besides, the general purposive in English, without the use of a motion verb in the main clause, is also created by the to-infinitive (See (4-203)). In other words, either motion or general purposive construction is formed by the to-infinitive verb in English. In this part, I take these two syntactic parameters to clarify the purposive function of the converbal ending **-mi* in Tungusic and imperfective converbal forms in adjacent languages.

4.4.2.1. Udihe

According to Udihe text and elicitation data, the converb with *-mi*, preceding motion verb, is frequently used in motion purposive construction, as illustrated in (4-204) and (4-206). However, it should be emphasized that the *-mi* generally requires the directional-intentional suffix *-nA* after verb stem to acquire motion purposive interpretation. Without the use of suffix *-nA*, the converb with *-mi*, e.g., (4-205), is not interpreted as a purposive according to the elicitation. The directional-intentional suffix *-nA* can denote by itself motion purposive meaning at monophrase structure, as exemplified in (4-207). Regarding general purposive, the *-mi* does not serve as a purposive marker in Udihe, as given in (4-209). Instead, the purposive converbal ending

-lA(gA)-PERS is employed to convey non-motional purposive construction, as illustrated in (4-210) and (4-211). The *-lA(gA)-PERS* can express motion purposive (cf. (4-209)) as well. The difference between *-nA-mi* and *-lAgA-PERS-* in motional purposive lies with switch-reference that the converb with *-mi* is restricted to same-subject motion purposive, while the purposive converb in *-lAgA-PERS* can make either SS or DS purposive construction. In short, the converbal form *-mi* in Udihe is verified to constitute motion purposive with the employment of the suffix *-nA*, whereas it is not used as a general purposive marker.

motion-purposive

[[V-*nA-mi* + motion verb]

- 4-204) *ǰǰgdǎ-nǎ-mi* *ǎmǎ-ǰ-i* *sii?*
 get.burned-DIRINT-SIM.CVB come-PRS-2SG 2SG.NOM
 ‘Do you come to get burned?’

(Kazama 2004: 137)

- 4-205) **nuani* *shkola-tigi* *tatusi-mi* *ǎmǎ/ǰǎnǎ-i-ni.*
 (s)he school-DIR study-SIM.CVB come/go-PTCP.PRS-3SG
 *‘(S)he comes / goes to school to study.’

(fielddata)

- 4-206) *nuani* *shkola-tigi* *tatusi-na-mi* *ǎmǎ/ǰǎnǎ-i-ni.*
 (s)he school-DIR study-DIRINT-SIM.CVB come/go-PTCP.PRS-3SG
 ‘(S)he comes / goes to school to study.’

(fielddata)

- 4-207) *nuani* *shkola-tigi* *tatusi-na-i-ni.*
 (s)he school-DIR study-DIRINT-PTCP.PRS-3SG
 ‘(S)he comes / goes to school to study.’

(fielddata)

- 4-208) *bii* *xunja-ǰii-ji* *mamaasala-laga-mi* *ǎmǎ-ǰǎ.*
 I younger.sister-INS-REF marry-PURP.CVB-REF come-IMP
 ‘Come to marry my younger sister.’

(Kazama 2004: 174)

non-motion purposive

4-209) **ulə-wə-ni* ***diga-mi*** *waa-ǰa-fi*.
 meat-ACC-3SG eat-SIM.CVB-REF.PL kill-FUT-1PL.INCL
 *‘We hunt [it] to eat its meat.’

(fielddata)

SS purposive

4-210) *ulə-wə-ni* ***diga-laa-fi*** *waa-ǰa-fi*.
 meat-ACC-3SG eat-PURP.CVB-REF.PL kill-FUT-1PL.INCL
 ‘We will hunt [it] to eat its meat.’

(Kazama 2004: 62)

DS purposive

4-211) *sokto-ǰo-mi* *sii* ***ɲua-laga-i***.
 make.bed-FUT-1SG 2SG.NOM sleep-PURP.CVB-2SG
 ‘I will make bed in order for you to sleep.’

(Kazama 2010a: 228)

4.4.2.2. Tungusic

Table 4-9. Purposive converbal endings in Tungusic

		motion.PURP.CVB	general.PURP.CVB	PURP.CVB
N.T.	Ek (I)	-dA-PERS	-dA-PERS	-dA-PERS
	E (I)	-nA-mi, -dAA-PERS	-dAA-PERS	-dAA-PERS
E.T.	N (I)	-nA-mi, -dAA-PERS	-dAA-PERS	-dAA-PERS
	Ol (III)	-ɲdA-mi, -bdA-PERS	-bdA-PERS	-bdA-PERS
	Nn (III)	-ndA-mi, -(pO)gO-PERS	-(pO)gO-PERS	-(pO)gO-PERS
	Oc (II)	-nA-mi, -(A)lA(k)A-PERS	-(A)lA(k)A-PERS	-(A)lA(k)A-PERS
	Ut (III)	-ɲdA-mi, -buddu-PERS	-buddu-PERS	-buddu-PERS
	U (II)	-nA-mi, -lAgA-PERS	-lAgA-PERS	-lAgA-PERS
	S (I)	(-nA)-mi	?	-
S.T.	H _z (II)	(-nA)-mi	?	-
	M (IV)	-mə	-mə	-
	S (Sb)	-mə	-mə	-

As illustrated in Table 4-9, the converbal ending **-mi* in most Tungusic languages is attested to function as a motion purposive marker. Note that there are differences among Tungusic in the formation of motion purposive function by the converbal form **-mi*. Tungusic on the Russian territory dominantly requires the directional-intentional suffix **-nA* or **-ndA* for motion purposive interpretation (cf. (4-212), (4-213), (4-214), (4-215), and (4-216)). On the contrary, the **-mi* converb in South Tungusic, in particular Solon, Manchu, and Sibe, tends to form motion purposive without the use of the directional-intentional suffix **-nA* or **-ndA* in comparison with Russian Tungusic, as illustrated in (4-217), (4-218), (4-219), and (4-220). Furthermore, as found in (4-221)-(4-224), the converbal form *-mə* in Manchu and Sibe is shown to constitute general purposive construction as well. Tungusic on the Russian side has an extra purposive converb, whereas corresponding purposive forms are non-existent in South Tungusic (Solon, Hezhen, Manchu, and Sibe)³⁶, as in Table 4-9. In short, the converbal ending **-mi* in most of Tungusic, added by the directional-intentional suffix **-nA* or **-ndA*, can function as a motion purposive marker. What is striking here, however, is that Tungusic in the Chinese areas has a tendency to create the purposive construction without additional elements by simply juxtaposing two verbs with the connection of the **-mi*, in comparison with Russian Tungusic. In addition, the corresponding converbal forms in Manchu and Sibe can form the general purposive as well.

• **motion purposive**

Even (I)

4-212) *tadük ĵapkan stadal örmür it-nə-mi əm-ni-tən.*

that.ABL eight herd.PL reindeer.REF.PL see-DIRINT-COND.CVB come-PTCP.PST-3PL

‘From there the people of the eighth brigade came to look after their reindeer.’

(B. Pakendorf fielddata)

Orochi (II)

4-213) *asaanta ɣənə-xə-ti ĵiiktə-wə gaŋ-na-mi.*

women.PL go-PTCP.PST-3PL berry-ACC take-DIRINT-SIM.CVB

‘Women went to take berries.’

(Avrorin and Boldyrev 2001: 366)

³⁶ However, in Oroqen Evenki inside the Chinese border, purposive converb *-dA* is reported in Hu’s (1986) work. In addition, note that the South Tungusic languages commonly possess the purposive postpositions *ĵarun* (S), *ĵələč* (Hz), *ĵalin* (M), and *ĵaliin* (Sb).

Ulcha (III)

- 4-214) *xusə nakü-wa gələ-ŋdŋ-ju-mi ügda-ŋi-pü tɯ ʃiʃu-xə-mbi.*
male chicken-ACC seek-DIRINT-REP-CVB boat-INS-1PL hat return-PTCP.PST-1SG
‘[I] returned in our boat to seek a rooster.’

(Kazama 2008c: 148-149)

Nanay (III)

- 4-215) *sogdata-wa bota-nda-mi ənə-i nii ənə-i.*
fish-ACC catch-DIRINT-SIM.CVB go-PTCP.PRS person go-PTCP.PRS
‘A person who goes to catch fish goes.’

(Kazama 2008b: 92)

Uilta (III)

- 4-216) *itə-nda-mi ɣənə-xə-ni.*
see-DIRINT-CVB go-PTCP.PST-3SG
‘[He] went to see [it].’

(Ikegami 2002b: 20)

Solon (I)

- 4-217) *axɯnɯ-l nuxunili-wi galəə-m ul-čəə ɣunən.*
older.brother-PL younger.brother-REF seek-SIM.CVB go-PTCP.PST say.IMPF.3
‘They say that older brothers went to find his younger brothers.’

(Kazama 2007d: 52)

Hezhen (II)

- 4-218) *bi imaxa waxči-m ənə-ja.*
I fish catch-IMP.CVB go-VOL.1SG
‘I want to go to catch a fish.’

(An 1986: 50)

Manchu (IV)

- 4-219) *bi booha uda-mə ɣənə-rə.*
I snack buy-IMP.CVB go-PTCP.FUT
‘I will go to buy a snack (for drinking).’

(Tsumagari 1981: 154)

Sibe (IV)

- 4-220) *aĵig ħrin-t gum təvat iv-m gənə-m.*
 small time-DAT all there play-IMPF.CVB go-IMPF
 ‘In our childhood, we all were going there to play.’

(Zikmundová 2013: 59)

• general purposive

Manchu (IV)

- 4-221) *sain kooli bə ala-bu-mə baitala-ki.*
 good example ACC notify-CAUS-IMPF.CVB use-OPT.1
 ‘I want to use [it] to notify a good example.’

(Tsumagari 1981: 155)

- 4-222) *səĵən kalka faida-fi, bira bə*
 car shield arrange-ANT.CVB river ACC
si-mə wəilə-bu-rə də.
 block-IMPF.CVB work-CAUS-PTCP.IMPF DAT
 ‘When making [someone] arrange a car shield to block a river.’

(Tsumagari 1981: 155)

Sibe (IV)

- 4-223) *bo ĵu antgəv jamushun bəda uluvu-m*
 we.EXC two guest.ACC evening meal treat-IMPF.CVB
şölih bi-hə-ŋə.
 invite.PTCP.PFV be-PTCP.PFV-NMLZ
 ‘We had invited two guests to treat them to dinner.’

(Chaoke 2006: 301)

- 4-224) *čimar ərdə ʂi ai ərind*
 tomorrow morning 2SG.NOM what time.DAT
i-m ĵi-m bəlhə=jə?
 get.up-IMPF.CVB come-IMPF.CVB prepare.PTCP=CLT
 ‘What time do you prepare to get up tomorrow morning?’

(Chaoke 2006: 274)

4.4.2.3. Neighboring languages

As found in (4-225)-(4-228), imperfective converbal endings *-t* in Kolima Yukaghir and *-A* in Sakha are employed to form either the motion or general purposive.

In contrast, the imperfective gerund *-ja* in Russian and imperfective converb **-ju* in Mongolic do not serve as motion or general purposive markers.

Kolima Yukaghir

· motion purposive

4-225) *tet legul ays'ii-t ejre-k.*
 you food search-IMPF.CVB walk-IMP.2SG
 'Walk to search a food.'

(Maslova 2003: 162)

· general purposive

4-226) *tit šoromo kimdan'e-rii-t taat me+gudie=jemet..*
 you person deceive-N.ITER-IMPF.CVB that AFF-become-INTR.2PL
 'You did it in order to deceive people.'

(Maslova 2003: 389)

Sakha

· motion purposive

4-227) *jon ebiettii kel-er.*
 people have.lunch.IMPF.CVB come-PRS.3SG
 'People come to have a lunch.'

(Korkina 1985: 86)

· general purposive

4-228) *üs kös-tööx ürex balaran-u-gar xon-o toxtoo-tu-lar.*
 three kös-PROP river tent-3SG-DAT spend.a.night-IMPF.CVB stop-PST-3PL
 'They stopped to spend a night at tent on the riverside three kös away (about 30 kilometers).'

(Korkina 1985: 87)

Next, I examine the purposive construction in Chinese. Example (4-229) below indicates that a motion purpose in Chinese can be created by putting V2 after a motion verb. In addition, the general purposive construction, not requiring a motion verb, is also made by juxtaposing two verbs in order (See (4-230)). In other words, either a motion or general purposive in Chinese is formed by two consecutive verbs in Chinese. The author supposes that the flexible formation of purposive construction by serial verbs in Chinese arises from the syntactic characteristics of the isolating type of language.

Chinese

· motion purposive

4-229) *nǐ guìxiàlai qiú Zhāng-san.*

you kneel.down beg Zhang-san

‘You knelt down in order to beg Zhang-san.’ [motion purposive]

‘You knelt down and begged Zhang-san.’ [temporal sequence]

(Li and Thompson 1973: 98)

· general purposive

4-230) *wǒ mǎi piào jìnqù.*

I buy ticket go.in

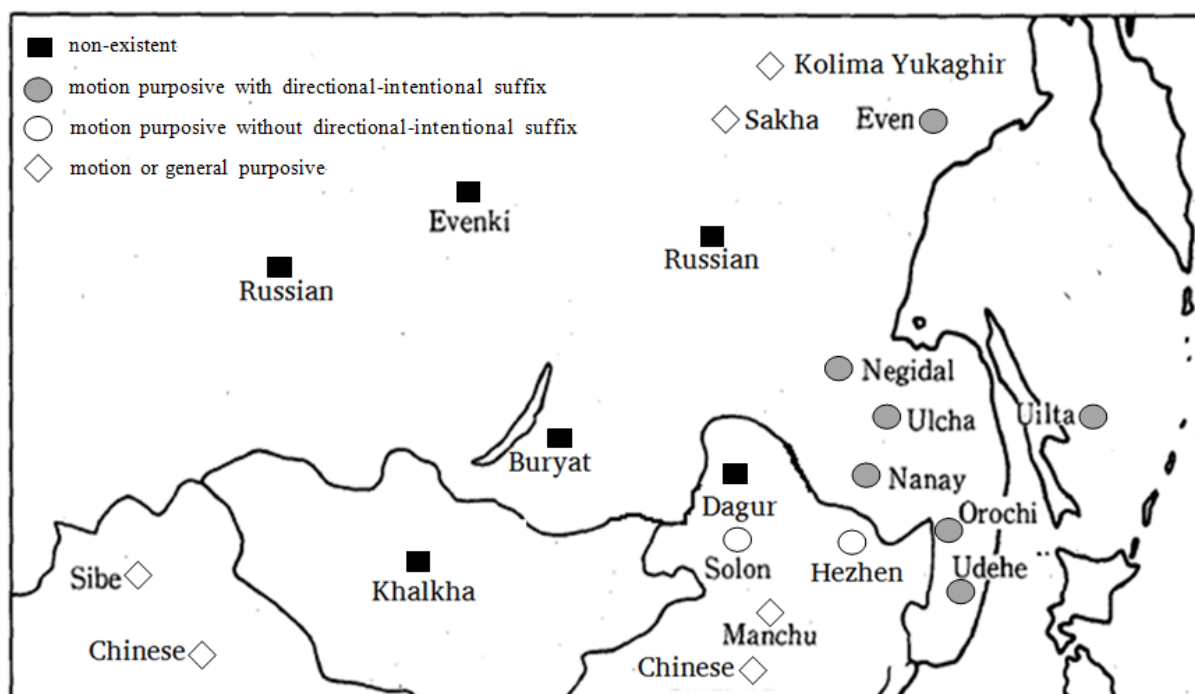
‘I bought a ticket to go in.’ [general purposive]

‘I bought a ticket and went in.’ [temporal sequence]

(Li and Thompson 1981: 595)

4.3.2.4. Summary

Map 4-6. Converb ending **-mi* in Tungusic and imperfective converbal endings in the neighboring languages from the purposive perspective



As organized in Map 4-6, the **-mi* form, followed by a motion verb, can function as a purposive marker in most of Tungusic. Nevertheless, different syntactic phenomena in the formation of purposive structure are identified among the Tungusic languages. For example, Tungusic in the Russian region overwhelmingly requires the directional-intentional suffix **-nA* or **-ndA* in the converb **-mi* for motion purposive interpretation, whereas the suffix **-nA* can be possibly omitted in most South Tungusic languages. Moreover, the use of the converb with **-mi*, functioning as a general purposive marker, is dominantly restricted to Manchu and Sibe, which has been under the Chinese influence for a relatively-longer time than other South Tungusic languages. Instead, Russian Tungusic possesses an extra purpose verbal marker to represent either the motion or general purposive, whereas the corresponding purposive converb forms are rare in South Tungusic. In short, the author proposes that the non-use tendency of the directional-intentional suffix in the converb with *-mi* for motion purposive in South Tungusic and the use of the converb **-mi* for either motion or non-motion purposive in Manchu and Sibe are possibly attributed to the occurrence of motion or general purposive structures by consecutive juxtaposition of two verbs in Chinese.

4.4.3. Conditional

According to the typological studies (Whaley (1997), Thompson et al. (2007), and Dixon (2009)) on conditionals from the cross-linguistic point of view, conditional constructions are semantically classified into two types, real and unreal conditionals, on the basis of occurring potentiality of events. In this study, as Figure 4-5 represents, real conditionals include (4-232) present situations (present tense), (4-233) predictions (future tense), and (4-234) requests (imperative mood), which can potentially occur in real situation. However, I do not include (4-231) generic or habitual conditionals as real conditionals, in order to draw a clear line between conditional and non-conditional interpretations. On the other hand, unreal conditionals convey the condition against (4-235) present situation (hypothetical) or (4-236) past event (counterfactual). In case of unreal conditionals, the main clause takes either the subjunctive mood or perfective, past tense, and modality particle to denote irrealis event. We can attest that the hierarchy of conditionals depending on the degree of likelihood decreases from real (present situations, predictions, and requests) to unreal (hypothetical and counterfactual) conditionals.

Figure 4-5. Typological parameters of conditionals by semantic type

(i) real conditionals	
· generic / habitual	
4-231) If you step on the brake, the car slows down.	(Thompson et al. 2007: 255)
· present situations	
4-232) If it's raining out there, my car is getting wet.	(Thompson et al. 2007: 255)
· predictions	
4-233) If he gets the job, we'll all celebrate.	(Thompson et al. 2007: 256)
· requests	
4-234) If you like it, try it.	
(ii) unreal conditionals	
· hypothetical	
4-235) If I were a rich man, I would fiddle all day long.	(Whaley 1997: 253)
· counterfactual	
4-236) If Ted had been more responsible, they would have arrived safely.	(Whaley 1997: 253)

4.4.3.1. Udihe

The converbal ending *-mi* in Udihe, as presented in examples (4-237) to (4-239) from either elicitation data or Udihe texts, is used to form real conditionals when the main clause is in the future tense, imperative or optative mood. Regarding unreal conditionals created by the subjunctive marker *-musə-* in the main clause, on the other hand, there is a difference between Udihe speakers in the employment of the converb with *-mi*. My consultant, a relatively younger generation of speakers, uses the converbal suffix *-mi* to express the unreal conditional with the subjunctive mood *-musə-* in the matrix clause (See 4-241), whereas such an unreal conditional construction is not confirmed in other linguistic data from relatively older Udihe speakers. Besides, Kanchuga and Tsumagari (2010), whose textual material I have consulted, show only

two examples (e.g., 4-240) of the *-mi* form in unreal conditionals. According to Nikolaeva and Tolskaya (2001) and Kazama (2010a), unreal conditionals in Udihe are generally formed by a conditional particle *bisi* with the irrealis suffix *-musə-* in the main clause (See Chapter V for specific examples).

i) real conditional

· future tense

- 4-237) *nuani manga bi-mi,*
 he strong be-SIM.CVB
uti sagdi jolo-wo uində-mi mutə-ǰəŋə-ni.
 that big stone-ACC lift up-SIM.CVB be.able-PTCP.FUT-3SG
 ‘If he is strong, [he] will be able to lift up that big stone.’

(fielddata)

· imperative mood

- 4-238) *čaala-mi diga-ja-u.*
 agree-SIM.CVB eat-IMP-2PL
 ‘If you want, eat (it).’

(Kazama 2010a: 224)

· optative mood

- 4-239) *diga-mi diga-du-tə=ǰə.*
 eat-SIM.CVB eat-PL-OPT=CLT
 ‘If they eat, let them eat.’

(Kazama 2010a: 46)

ii) unreal conditional

· subjunctive mood

- 4-240) *sii utawa igbə-mi, kulə ə-musə biə.*
 2SG.NOM that.ACC drive.out-SIM.CVB enough NEG-SUBJ be
 ‘It would be enough if you drove [them] out.’

(Kanchuga and Tsumagari 2010: 47)

- 4-241) *nuani udiə kəwə-ni saa-mi,*
 (s)he Udihe language-3SG know-SIM.CVB
udiə-ǰigə-ǰi diana-mi mutə-musə-ø.
 Udihe-PL-COM speak-SIM.CVB be.able-SUBJ-3
 ‘If (s)he knew the Udihe language, (s)he could speak with Udihe people’

(fielddata)

4.4.3.2. Tungusic

Referring to the previous literatures and textual materials, I consider whether the converbal ending **-mi* in all Tungusic languages can function as a real and/or unreal conditional marker in present, future, imperative, and subjunctive sentences. Nedjalkov, I. V. (1995) observes that the converbal form *-mi* in Evenki leads to a conditional reading when future tense, imperative, and subjunctive moods occur in the main clause. As given in examples (4-242) and (4-243) below, the *-mi* in Evenki can create both real and unreal conditionals. Notice that the subjunctive mood *-mčA-* is used in the main clause to form unreal conditionals. Furthermore, Even and Negidal, members of the first group of Tungusic languages in the northern Russian region, also employ the converb with *-mi* in combination with either future tense and imperative or subjunctive mood to respectively express real and unreal conditionals, as in (4-244), (4-245), (4-246), and (4-247). With regard to East Tungusic languages, the **-mi* form in Ulcha, Nanay, Orochi, Uilta and Udihe serves as a conditional marker with at least one of the above-mentioned verbal categories in the matrix clause, as illustrated in (4-248), (4-249), (4-250), (4-251), (4-252), and (4-253). However, the author cannot find an example of unreal conditionals with a combination of the converbal ending **-mi* in the subordinate clause and subjunctive mood in the main clause in Ulcha and Nanay. Moreover, concerning the formation of unreal conditionals, the converbal suffix *-mi* in Udihe is very limited, showing a different phenomenon between speakers. The reason for this is presumed to be that these Tungusic languages mainly use other conditional markers (Ol: *bimčəni*, Nn: *osmi*, *bimčəni*, U: *bisi*) to convey either hypothetical or counterfactual conditionals. This will be analyzed in detail in Chapter V. Nonetheless, Orochi (possibly Uilta as well), also classified as East Tungusic language, takes the converbal ending *-mi* in the antecedent clause and subjunctive mood in the consequent clause to form unreal conditionals, as presented in (4-251). Lastly, the **-mi* in South Tungusic (Solon, Hezhen, and Manchu), distributed in the northeastern Chinese province, does not semantically function as a conditional marker even with present tense, future tense, imperative mood, and subjunctive mood in the main clauses. Instead, conditional converbs (Solon *-kki*, Hezhen *-ki*, and Manchu *-č'i*) in South Tungusic are used to form real and unreal conditionals. Concerning Sibe, Kubo et al. (2011: 42) point out that the converbal form *-mə(=da)* in Sibe forms generic or habitual conditionals (4-254), not admitted as conditionals in this study. However, in reference to Kubo et al. (2011) and

Sameng et al. (2010), there are examples of real conditionals, in imperative sentence, by the converb in *-mə*, as in (4-255) and (4-256). It is noteworthy that the converbal ending *-mə* in Sibe shows a difference in conditional function from other South Tungusic languages.

As a rule, the converbal suffix **-mi* in North and East Tungusic commonly functions as a same-subject real conditional marker. Nonetheless, there is a gap in the conditional types with the use of **-mi* form between North and East Tungusic. Concretely, the converbal forms **-mi* in North Tungusic (Evenki, Even, and Negidal) are employed in either real or unreal conditionals. On the contrary, the corresponding converbs in East Tungusic (Ulcha, Nanay, and Udihe), with the exceptions of Orochi and Uilta (?), are dominantly limited to real conditionals. Lastly, the converbal forms **-mi* in South Tungusic except Sibe do not serve as a conditional element, which is strikingly different from those members of the Tungusic family in the Russian territories.

Evenki (I)

· real conditional

4-242) *qja-t hawa-l-mii-l, bəjə-l oo-ʃaŋaa-sun.*
 good-INS work-INC-COND.CVB-PL person-PL become-PTCP.FUT-2PL

‘If [you] would start working well, [you] will become a person.’

(Bulatova and Grenoble 1999: 44)

· unreal conditional

4-243) *asatkan-mə əjaw-mi, asila-mča-w.*
 girl-ACC love-COND.CVB marry-SUBJ-1SG

‘If [I] loved this girl, [I] would marry her.’

(Nedjalkov, I. V. 1997: 54)

Even (I)

· real conditional

4-244) *əm-mi, göön-ʃi-m.*
 come-COND.CVB say-FUT-1SG

‘If/when [I] come, [I] tell.’

(Malchukov 1995: 18)

· unreal conditional

- 4-245) *ini bi-mi, girkawač-mča-ø.*
alive be-COND.CVB move.around-SUBJ-3SG
'If it were alive, it would move around.'

(Malchukov 2008: 271)

Negidal (I)

· real conditional

- 4-246) *ge, bəlat-mi, bəlat-kəl=kə.*
INTJ help-COND.CVB help-IMP.2SG=CLT
'If you help, help.'

(Kazama 2002: 121)

· unreal conditional

- 4-247) *ti n'əxə-ǰə-wə-s saa-čaa bi-mii,*
that do-PTCP.FUT-ACC-2SG know-PTCP.PST be-COND.CVB
ə-mčo-w xəlbə-jə.
NEG-SUBJ-1SG take-PTCP
'If I knew that you do (it) that way, I would not take (you) here.'

(Cincius 1982: 57)

Ulcha (III)

· real conditional

- 4-248) *xar=daa manga-wa-ni baka-mi, mimbə xəərči-səəri.*
what=CLT difficulty-ACC-3SG find-SIM.CVB I.ACC call-FUT.IMP.2SG
'If [you] find any difficulty, call me out.'

(Kazama 2006c: 117)

Nanay (III)

real conditional

- 4-249) *bumbiə mana-mi, sumbiə waa-nda-ǰaraa.*
we.ACC finish-SIM.CVB 2PL.ACC kill-DIRINT-FUT.3
'If [they] finish us, [they] will kill you.'

(Kazama 2010b: 243)

Orochi (II)

· real conditional

- 4-250) *toojo aali=daa jaü=daa n'ä doogdi-maji, gun'-jəŋə-ti.*
that.ACC=CLT when=CLT what=DAT people listen-SIM.CVB.PL say-PTCP.FUT-3PL
'If people listen to that anyhow, they will say [it].'

(Avrorin and Boldyrev 2001: 366)

· unreal conditional

- 4-251) *adülikaŋ-ki bi-či bi-mi,*
net-PROP be-PTCP.PST be-SIM.CVB
ei noso-wo waa-jəŋa-i bi-či=gin'i.
this boar.ACC kill.PTCP.FUT.1SG be-PTCP.PST=CLT
'If I had a net, I would hunt this boar.'

(Avrorin and Boldyrev 2001: 320)

Uilta (III)

· real conditional

- 4-252) *itə-mi, saa-ri-wi.*
see-SIM.CVB know-PTCP.PRS-1SG
'If I see (it), I will know (what it is).'

(Ikegami 2001 (1959): 32)

- 4-253) *ə-mi saa-ra, tačiroo.*
NEG-SIM.CVB know-PTCP.PRS study.IMP
'If you do not know, study [it].'

(Yamada 2013: 232)

Sibe (IV)

· generic conditional

- 4-254) *əŋə kurwu-wə dulu-mə, čafčalə-də isinə-mi.*
this bridge-ACC cross-IMPF.CVB Cafcale-DAT arrive-IMPF
'If [one] cross this bridge, [one] arrives at Cafcale.'

(Kubo et al. 2013: 88)

· real conditional

- 4-255) *solo bi o-mə, mini bo-d gəŋsi-m jo-ø.*
free be become-IMPF.CVB I.GEN house-DAT come-IMPF.CVB play-IMP
'If there is a free time, come to my house and play.'

(Sameng et al. 2010: 456)

- 4-256) *fyoNjiN bi-mə, galə tiki-ø.*
 question be-IMPF.CVB hand take.out-IMP
 ‘If there is a question, raise your hand.’

(Kubo et al. 2011: 47)

4.4.3.3. Neighboring languages

Maslova (2003) reports that the imperfective converbal suffix *-t* in Kolima Yukaghir can convey “a simultaneous accompanying situation” or “the cause of the controlling clause situation”, including immediate temporal sequence, manner, and purpose. However, there is no previous study or example concerning conditional function of imperfective converb in Kolima Yukaghir. Conditional function by the imperfective converbal ending *-A* in Sakha is not attested either. For conditional constructions in Kolima Yukaghir and Sakha, conditional converbal forms *-ŋidel/-gene, -tax-* (RLIS.COND) / *-tar-* (IRLIS.COND), as introduced in Chapter V, are respectively in use. With regard to Russian, conditional readings, both real and unreal, are formed with *-ja* in Russian when future tense and subjunctive mood appear in the main clause, as illustrated in (4-257) for the real condition (future tense < perfective verb in the main clause) and in (4-258) for unreal condition (with subjunctive mood in the main clause). However, note that unreal conditionals in Russian are generally formed with the combination of conditional conjunction *esli* and subjunctive marker *by*. Moreover, the author cannot confirm the conditional function of *-ja* with imperative mood in the main clause, which is presumed to stem from the fact that *-ja* is used in the literary style.

Russian

- 4-257) *raz’ezža-ja po strane, on navedet spravki o syne.*
 travel-IMPF.GRD around country he will.make.3SG inquiries about son
 ‘If [he] travels around the country, he will make inquiries about his son.’

(Boguslavskij 1977: 271)

- 4-258) *zna-ja eti slova, vy mogli by vce perevecti.*
 know-IMPF.GRD these words 2PL.NOM can.PST.PL SUBJ all translate
 ‘If [you] knew these words, you would translate all.’

(Shirota 2010: 393)

Turning to adjacent Mongolic languages, the imperfective converbal ending **-ju*

in Buryat, Dagur, and Khalkha can also form multi-semantic functions, such as simultaneity, anteriority, and causality. Nevertheless, conditionals connected with **-ǰu*, are not confirmed in the previous literature or in textual materials. As with South Tungusic (Solon, Hezhen and Manchu) in the northeastern Chinese province, present tense, future tense, imperative and subjunctive moods in the main clause cannot lead to conditional readings, as reconfirmed from elicitation data from my Buryat and Khalkha Mongolian consultants. Consider examples (4-259), (4-261), (4-263), (4-265), (4-267), and (4-269). We can attest that the imperfective converbs in Mongolic are not used even in generic or habitual conditionals, not admitted as real conditionals in this study. Instead, real and unreal conditionals in these Mongolic languages are formed by the conditional converbal forms *-bAl-* (Buryat), *-(g)AAs-* (Dagur), *-bAl* (Khalkha) and conditional particles *hAA* or *xada* (Buryat), *aasaa* (Dagur), *bol* (Khalkha), respectively, both with same or different subject (See Chapter V).

Buryat

· present tense

generic

4-259) *zun bolo-žo, seseg delger-ne.*
 Summer become-IMPF.CVB flower blossom-N.PST
 *‘If it becomes Summer, flower blossoms.’

(felddata)

4-260) *zun bolo-bol, seseg delger-ne.*
 Summer become-COND.CVB flower blossom-N.PST
 ‘If it becomes Summer, flower blossoms.’

(felddata)

habitual

4-261) *erte bodo-žo, nom unša-dag-bi.*
 early get.up-IMPF.CVB book read-HAB-1SG
 *‘[Usually] if I get up early, [then] I read a book’

(felddata)

4-262) *erte bodoo haa, nom unša-dag-bi.*
 early get.up.PTCP.IMPF if book read-HAB-1SG
 ‘[Usually] if I get up early, [then] I read a book’

(felddata)

· imperative mood

4-263) *aba-ǰa,* *namda* *xele-ø.*

take-IMPF.CVB I.DAT say-IMP.2SG

*‘Say if you take (buy) it.’

(felddata)

4-264) *abaa* *haa,* *namda* *xele-ø.*

take-IMPF.PTCP if I.DAT say-IMP.2SG

‘Say if you take (buy) it.’

(felddata)

Khalkha

· present tense (generic)

4-265) *bulangaar* *erge-ǰ,* *xara-gda-na.*

corner-INS turn-IMPF.CVB see-PAS-N.PST

*‘If you turns the corner, you see [sth].’

(felddata)

4-266) *bulangaar* *erge-bel,* *xara-gda-na.*

corner-INS read-COND.CVB see-PAS-N.PST

‘If you turns the corner, you see [sth].’

(felddata)

· future tense

4-267) *üün-ijg* **unš-č,* *ojlgo-x* *baj-x.*

this-ACC read-IMPF.CVB understand-PTCP.FUT be-PTCP.FUT

*‘If [you] read this, you will understand [it].’

(felddata)

4-268) *üün-ijg* *unš-val,* *ojlgo-x* *baj-x.*

this-ACC read-COND.CVB understand-PTCP.FUT be-PTCP.FUT

‘If [you] read this, you will understand [it].’

(felddata)

· imperative mood

4-269) *margaas* *ert* **bos-č,* *nad* *deer* *ir-eerej.*

tomorrow early get.up-IMPF.CVB I.DAT toward come-IMP

*‘If you get up early tomorrow, please come to me.’

(felddata)

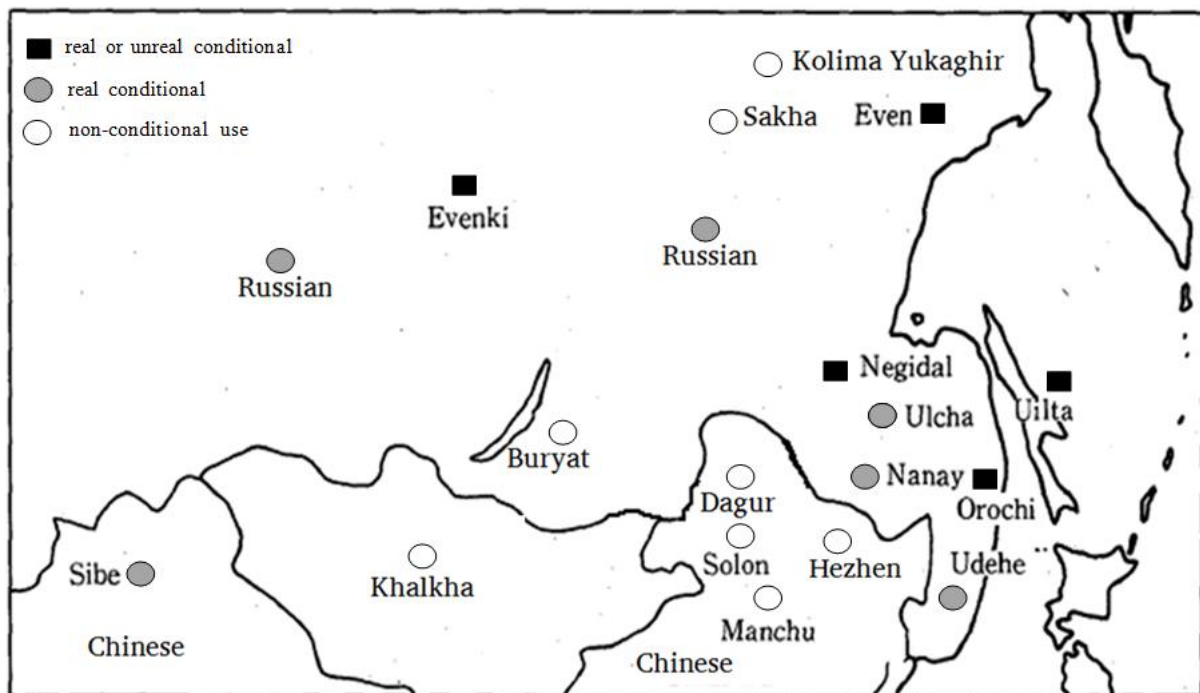
4-270) *margaaš ert bos-vol, nad deer ir-eerej.*
 tomorrow early get.up-COND.CVB I.DAT toward come-IMP
 ‘If you get up early tomorrow, please come to me.’

(fielddata)

4.4.3.4. Summary

As discussed above, the Tungusic converb with **-mi* shows a difference in conditional function according to geographical distribution. As Map 4-7 illustrates, the converbal ending **-mi* in North and East Tungusic generally functions as a conditional marker.

Map 4-7. Converb ending **-mi* in Tungusic and imperfective converbal endings in the neighboring languages from the conditional perspective



However, there is a distinction in the formation of unreal conditionals between North and East Tungusic, i.e., the **-mi* in Evenki, Even, and Negidal definitely functions as a same-subject conditional marker in the subordinate clause with the use of subjunctive mood in the main clause, but Ulcha, Nanay, and Udihe, with the exceptions of Orochi and Uilta (?), tends to restrict the use of the **-mi* to real conditional marker. The **-mi* in

South Tungusic except Sibe, spoken in the Chinese territories, does not have such a conditional function. Interestingly, the imperfective converbs in **-ju* in the Mongolic languages are never used to form conditional constructions with the same verbal forms in the main clause. In short, the conditional function of the converbal form **-mi* varies in accordance with geographical region and the non-use of the converb with *-mi* as a conditional marker in South Tungusic in the northeastern Chinese area is consistent with semantically-corresponding imperfective converbal elements in the neighboring Mongolic languages.

4.5. Conclusion

Having applied morpho-syntactic and semantic typological parameters of converbs to the converbal ending **-mi* in the Tungusic languages and semantically-corresponding imperfective converbal forms in neighboring languages, I summarized the results in Table 4-10 and 4-11, respectively. In conclusion, the converbal form **-mi* is proved to show conspicuous distinctions among Tungusic in different geographical regions in the following standards: (a) morpho-syntactic: number marking, auxiliary verb structure, grammaticalization of speech verbs, (b) semantic: purposive, conditional.

i) Number-marking

There are three patterns confirmed among Tungusic in plural-marking of the converbal suffix **-mi*: nominal plural (Evenki), reflexive plural (Negidal, Ulcha, Nanay, Orochi, Uilta, and Udihe (Xor)), and non-plural marking in Tungusic (Udihe (Bikin), Solon, Hezhen, Manchu, and Sibe). First, Evenki can mark plurality of the subject with non-reflexive element (i.e., plural suffix *-l*) in the converbal form *-mi*. However, there is no plural-marking phenomenon of the *-mi* form attested in Even except in Arman dialect. The non-plural marking of the converbal ending *-mi* in Even is close to the imperfective converb in Kolima Yukaghir. Second, East Tungusic equally adopts the alternative form of the converb with *-mi* for plural marking, diachronically presumed to originate from the converbal ending **-mi* plus reflexive plural suffix **-bAAri*. With regard to Udihe, there is a difference of number-marking depending on the dialects; northern Xor dialect only retains number-marking in comparison with southern Bikin dialect. Thirdly, the **-mi* forms in South Tungusic lack number marking even in the plural subject, as with in Mongolic imperfective converbs. Thus, the plural marking system in North and East

Tungusic is considered an independent change within each Tungusic group, because there is no striking similarity with neighboring languages. Nevertheless, the lack of number-marking systems in Even and South Tungusic are consistent with the imperfective converbs in the neighboring Kolima Yukaghir and Mongolic languages, respectively.

Table 4-10. Tunguic converbal ending **-mi* from the morpho-syntactic and semantic perspective

		morpho-syntactic			semantic			
		number marking	AUX verb	grammaticalization of speech verbs	purposive		conditional	
					motion	general	real	unreal
N.T.	Ek	nominal plural	2	-	-	-	+	+
	E	non-plural	2	+	+	-	+	+
E.T.	N	reflexive plural	2	-	+	-	+	+
	Ol	reflexive plural	4	+	+	-	+	-
	Nn	reflexive plural	5	+	+	-	+	-
	Oc	reflexive plural	4	-	+	-	+	+
	Ut	reflexive plural	5	+	+	-	+	?
	U	reflexive plural non-plural	4	-	+	-	+	?
S.T.	S	non-plural	7	-	+	?	-	-
	Hz	non-plural	7	+	+	?	-	-
	M	non-plural	8	+	+	+	-	-
	Sb	non-plural	8	+	+	+	+	-

Table 4-11. Imperfective converbs in the adjacent languages from the morpho-syntactic and semantic perspective (K.Y: Kolima Yukaghir, Sk: Sakha, R: Russian, B: Buryat, D: Dagur, K: Khalkha, and C: Chinese)

		morpho-syntactic			semantic			
		number marking	AUX verb	grammaticalization of speech verbs	purposive		conditional	
					motion	general	real	unreal
North	K.Y.	non-plural	1	+	+	+	-	-
	Sk	plural	1	+	+	+	-	-
	R	non-plural	-	-	-	-	+	?
South	B	non-plural	8	+	-	-	-	-
	D	non-plural	7	+	-	-	-	-
	K	non-plural	8	+	-	-	-	-
	C	-	8	-	+	+		

ii) Auxiliary verb structure

The auxiliary verb structure with the employment of the converbal form **-mi* shows remarkable differences, in particular capable-related auxiliary verb types and development of auxiliary verb structure, among Tungusic on the basis of geographical distribution. In North Tungusic (Evenki, Even, and Negidal), the converb with **-mi* is limited to forming completive and negative-capable (**alba-* ‘unable’) auxiliary verb structures. Note that the negative capable auxiliary verb structure in North Tungusic is similar to those of Mongolic (Buryat and Khalkha). The imperfective converbs in adjacent Kolima Yukaghir and Sakha are individually restricted to completive and progressive auxiliary verb structures without being used in other auxiliary verb structures. However, the **-mi* forms in South Tungusic tend to be employed to constitute either inceptive, completive, and positive-capable (**mutə-* ‘able’, **ulxi-* ‘understand’, **baka-* ‘obtain’ or **bahana-* ‘know’, **o-* ‘become’) or progressive, attemptive, benefactive, and perfective auxiliary verb structures, notwithstanding a partial development gap among the Tungusic languages on the Chinese territories. Among neighboring languages in the South region, the imperfective converbs in Mongolic mostly coincide with the **-mi* forms in South Tungusic in the formation of auxiliary verb structure. In addition, Chinese, making a huge impact on South Tungusic, also maintains similar auxiliary verb structures. Lastly, East Tungusic has the in-between

syntactic features in the formation of auxiliary verb structure because the converbal ending *-mi* constitutes inceptive, completive, positive-capable (**mutə-* ‘able’, **ulxi-* ‘understand’), and progressive auxiliary verb structures. In a nutshell, distinct capable auxiliary verb types and different development of auxiliary verb constructions among Tungusic are considered to be associated with geographical region, stemming from the different degree of influence of neighboring Mongolic and Chinese languages.

iii) Grammaticalization of speech verbs

Speech verbs plus the converbal ending **-mi*, functioning as a grammatical element to mark a quotative or complement index, are attested in the following Tungusic languages: Western Even, Ulcha, Nanay, Uilta, Hezhen, Manchu, and Sibe, mostly concentrated in the East and South Tungusic languages. As discussed in the previous study, the grammaticalization of speech verbs plus *-mi* in Western Even is considered to result from the influence of adjoined Sakha, since a similar syntactic phenomenon is not identified in Western Evenki, Eastern Even, and Negidal. Moreover, the grammatical elements originating from speech verbs plus converbal forms in Ulcha and Nanay are contracted to clitics *=m*, no longer retaining their original structure in comparison with the corresponding form *u-mi* (say-SIM.CVB) in Uilta. However, there is no such syntactic structure with the employment of the converbal ending *-mi* in the second group of Tungusic. Lastly, South Tungusic languages except Solon frequently employ speech verbs in the converbal form **-mi* to grammatically encode an index of quotative and complement clause. In Solon, the speech verb in the fossilized simultaneous converb introduces a quotative and complement clause, also confirmed in Eastern Evenki and Western Even. Based on these results, the grammaticalizations of speech verbs plus the *-mi* are grouped depending on areal position into three parts, namely (i) North Tungusic: non-developed, except Western Even from the influence of Sakha, (ii) East Tungusic: partially developed, (iii) South Tungusic: highly developed, which is presumably related to contact with different neighboring languages and distinct degree of influence from the Mongolic languages.

iv) Purposive

In contrast to the previous study, the converb with **-mi*, analytically combined with a motion verb, constructs motion purposive sentences in most Tungusic languages. Notably, Tungusic in Russian territory dominantly requires the directional-intentional

suffix **-nA* or **-ndA* in the **-mi* form to expect motion purposive interpretation in comparison with Tungusic in Chinese territory. With regard to the general purposive, this type of purposive without the use of a motion verb is limited to the converbal form *-mə* in Manchu and Sibe. Instead, Tungusic inside the Russian border commonly uses an extra purpose converb for general purposive construction, whereas such a purposive form is nonexistent in Solon, Hezhen, Manchu, and Sibe. The author supposes that the non-employment tendency of the directional-intentional suffix in South Tungusic and formation of general purposive in Manchu and Sibe are attributable to the Chinese syntactic feature creating either motion or general purposive by serial verbs, which is characteristic of an isolating type of language.

v) **Conditional**

The employment of the converbal ending **-mi* as a conditional marker is restricted to North and East Tungusic, whereas the **-mi* form in South Tungusic except Sibe does not work as a conditional marker in present, future, imperative, and subjunctive sentences. Note that there is also a distinction between North and East Tungusic in that the **-mi* in Evenki, Even, and Negidal can constitute either real or unreal conditionals, but the formation of unreal conditionals by the *-mi* is not a common phenomenon in East Tungusic. Furthermore, the non-use of the converb with *-mi* as a conditional marker in South Tungusic in the northeastern Chinese provinces agrees with the imperfective converbal suffix **-ju* in the neighboring Mongolic languages. In short, the conditional functions of the converbal form **-mi* show different patterns on the basis of areal position as follows: North Tungusic (Evenki, Even, and Negidal): real or unreal, East Tungusic 1 (Nanay, Ulcha, Udihe): real, East Tungusic 2 (Orochi, Uilta?): real or unreal, South Tungusic 1 (Solon, Hezhen, and Manchu): neither real nor unreal, and South Tungusic 2 (Sibe): real.

As organized above, morpho-syntactic and semantic differences (i.e., number-marking, auxiliary verb structure, grammaticalization of speech verbs, purposive, and conditional) among Tungusic correlate with areal distribution. The functions of the converbal form **-mi* in North Tungusic are remarkably different from those of South Tungusic languages. Western Even shares similar linguistic features with Kolima Yukaghir in non-plural marking and with Sakha and Kolima Yukaghir in grammaticalization of speech verbs. In addition, it should be mentioned that the use of

negative capable auxiliary verb structure in North Tungusic is analogous to Mongolic. The converbal ending **-mi* in South Tungusic, however, generally corresponds with the imperfective converb **-ju* in Mongolic at functional levels (i.e., non-plural marking, auxiliary verb structure, grammaticalization of speech verbs, and non-conditional use). Within auxiliary verb structure and purposive, Chinese influence should be pointed out as well. With regard to East Tungusic, the converb with **-mi* possesses in-between features of the corresponding forms in North and South Tungusic languages, i.e., auxiliary verb structure and grammaticalization of speech verbs, which can be understood as a result of the partial influence from the imperfective converbs in Mongolic. Following these results, we can verify that the areal factor is strongly associated with the functional differences of the converbal ending **-mi* in Tungusic languages. Thus, the author suggests that the areal-based functional distinctions of the converbal form **-mi* in Tungusic result from the contact with the different neighboring languages (Kolima Yukaghir, Sakha) and different degree of influence from Mongolic, and Chinese languages.

Chapter V Conditional forms

Chapter V

*Conditional forms*³⁷

Chapter IV has discussed that conditional function by the converbal ending **-mi* is observed only in North and East Tungusic. Conversely, the **-mi* forms in South Tungusic, distributed in Northern Chinese provinces, do not serve as a conditional marker, similar to the imperfective converbal ending **-ju* in neighboring Mongolic languages. In addition, even in the **-mi* between North and some of East Tungusic languages, there is a functional difference in the formation of unreal conditionals, combining with the subjunctive mood in the main clause.

Extending the scope of consideration from the converbal ending **-mi* to the entirety of conditional forms in Tungusic, Chapter V attempts to examine the Tungusic languages from the perspective of areal linguistics. This analysis will also clearly demonstrate why the variations of conditional functions in the converbal form **-mi* among Tungusic occur. The present chapter is organized into five parts as follows: § 5.1 introduces typological parameters (i.e., switch-reference and semantic classification) for conditional constructions in this study. In § 5.2, these two typological standards are applied to conditional elements in Udihe. Then, § 5.3 specifies the distinctions among conditional markers in all Tungusic languages with same standards in application. § 5.4 concentrates on conditional forms in the adjoined languages (Kolima Yukaghir, Sakha, Russian, Mongolic (Buryat, Dagur, and Khalkha)). In § 5.5, I provide the main points of this study.

5.1. Typological parameters for conditionals

In order to clarify the differences of conditional forms in Tungusic from the position of areal linguistics, this study employs the following syntactic and semantic typological parameters for conditionals: 5.1.1. switch-reference and 5.1.2. semantic classification.

³⁷ This is a revised and extended English version of my paper (Baek 2015), presented at the 12th Seoul International Altaistic Conference (Seoul, Jul. 17-18, 2015).

5.1.1. Syntactic parameter (switch-reference) ³⁸

As introduced in Chapter IV, “switch-reference” is defined as grammatically encoding either the retention or switch of subjects in the subordinate and main clauses. In terms of switch-reference, there are three possibilities, namely same-subject (SS), different-subject (DS), and variable-subject (VS) in conditionals. For instance, conditionals in Tümpisa, one of the Native American languages, are marked by different conditional forms depending on conjunction or disjunction of the subjects in the antecedent and consequent clauses. For example, the SS conditional marker *-tukwa* creates same-subject conditionals (5-1), whereas different-subject conditionals (5-2) are expressed by the DS conditional element *-ka ~ -kka ~ -ha*. Conversely, this kind of syntactic device does not function in Korean conditionals. As illustrated in (5-3) and (5-4), the conditional converbal ending *-myen* in Korean can constitute either SS or DS conditionals regardless of switch-reference.

(i) Same subject conditionals (Tümpisa)

5-1) *ukkwah nüü namokkupa'in-tukwa, hipittaippüh.*

If I have.money-SUBJ.SS drunk.IRLIS

‘If I had some money, I would be drunk.’

(Dayley 1989: 353)

(ii) Different subject conditionals (Tümpisa)

5-2) *memmia ün tiyoitai-ha, püü, nüü mi'ahippüh püü.*

Mamie.O you.O send-SUBJ.DS EMPH I go.IRLIS EMPH

‘If you sent Mamie away, I would go.’

(Dayley 1989: 353)

(iii) Variable-subject conditionals (Korean)

SS

5-3) *kongpu-eul yeolsimhi ha-meon, sungkonghal ket-i-ta.*

study-ACC hard do-COND.CVB make.a.succes.PTCP thing-COP-FINIT

‘If one studies hard, he will make a success.’

³⁸ Notice that, as mentioned in Chapter VI, the three conditions for the DS uses of same-subject converbs in Tungusic, (i) part-whole or possessive relation, (ii) “if the main clause describes a situation perceived by the main clause subjects,” (iii) condition and participants overlap between the subjects in the subordinate and main clauses, are regarded as exceptions since its frequencies are extremely rare.

DS

5-4) *keu-ga kongpu-eul ha-meon, neu=do kongpu ha-era.*
he-NOM study-ACC do-COND.CVB 2SG.NOM=CLT study do-IMP
'If he studies, then do study.'

5.1.2. Semantic parameter (real / unreal)

Figure 5-1. Typological parameters of conditionals by semantic type

(i) real conditionals	
· generic / habitual	
5-5) If you step on the brake, the car slows down.	(Thompson et al. 2007: 255)
· present situations	
5-6) If it's raining out there, my car is getting wet.	(Thompson et al. 2007: 255)
· predictions	
5-7) If he gets the job, we'll all celebrate.	(Thompson et al. 2007: 256)
· requests	
5-8) If you like it, try it.	
(ii) unreal conditionals	
· hypothetical	
5-9) If I were a rich man, I would fiddle all day long.	(Whaley 1997: 253)
· counterfactual	
5-10) If Ted had been more responsible, they would have arrived safely.	(Whaley 1997: 253)

As discussed in Chapter IV, conditionals are typologically classified into two types, namely (i) real and (ii) unreal, on the basis of whether or not the events in the conditional can potentially occur. In this study, the following conditionals: (5-6) present situations, (5-7) predictions, and (5-8) requests (which take present tense, future tense,

and imperative mood, respectively) in the main clause are defined as real conditionals. Note that (5-5) habitual or generic conditionals from this category are not included in this chapter. As for unreal conditionals, these are comprised of (5-9) hypothetical statements and (5-10) counterfactuals, both of which include either the subjunctive mood, or else the past tense, perfective, and modality forms in the independent clause.

5.2. Udihe

Table 5-1. Conditional forms in Udihe

	real conditional			unreal conditional		
	SS	VS	DS	SS	VS	DS
SIM.CVB	<i>-mi</i>					
COND.CVB	<i>-li</i>		<i>-(l)isi-PERS</i>			
COND.PART	<i>ədəisini, bisi</i>			<i>bisi</i>		

As organized in Table 5-1, there are five conditional forms confirmed in Udihe as follows: (i) the simultaneous converbal ending *-mi*, (ii) the conditional converbal ending 1 *-li*, (iii) the conditional converbal ending 2 *-(l)isi-*, (iv) the conditional particle 1 *ədəisini*, and (v) the conditional particle 2 *bisi*. From the perspective of switch-reference, conditional elements in Udihe can be grouped into three types: conjunction-oriented converbal forms *-mi* (SS) and *-li* (SS), disjunction-oriented converbal forms *-(l)isi-* (DS), and non-switch-reference-oriented conditional particles *ədəisini* (VS) and *bisi* (VS). According to previous descriptive grammars (Xor dialect (Shnejder 1936), Bikin dialect (Nikolaeva and Tolskaya 2001 and Girfanova 2002)), the SS conditional converb in *-li* is known to correspond to the DS conditional converb in *-(l)isi-* in switch-reference (cf. (5-11) and (5-12)). Nonetheless, there is no conditional element in opposition to the converbal ending *-mi*, dominantly employed in SS conditionals, in terms of switch-reference. This is considered to stem from the fact that Udihe does not maintain a corresponding form of DS conditional converb in **-rAk-*, clearly differentiated from North Tungusic languages (see § 5.3 for details). Turning to the conditional particles *ədəisini* and *bisi* (respectively presumed to be analyzed as a conditional converb of copular verb *ədə-* ‘become’ with the third person singular marker and a past participle form of copular verb *bi-* ‘be’), these are used to make either SS or DS conditional constructions, as found in ((5-13), (5-14), (5-15), and (5-16)), with no regard to switch-

reference. As for the semantic parameter of conditionals, real conditionals can be formed by the converbal forms *-mi*, *-li*, *-(l)isi-* and conditional particles *ədəisini* and *bisi* in present, future, optative, and imperative sentences. As pointed out in Chapter IV, the simultaneous converbal ending *-mi* generally functions as a same-subject real conditional marker but there is inconsistency among Udihe consultants in the employment of unreal conditionals with the subjunctive mood *-musə-* in the main clause³⁹. As discussed in Nikolaeva and Tolskaya (2001), the conditional converbs in *-li* and *-(l)isi-* are limited to real conditionals. On the other hand, the conditional particle *bisi*, as shown in (5-17) and (5-18), is generally utilized to express either hypothetical or counterfactual conditionals with the subjunctive element in the superordinate clause. In a nutshell, the employment of the conditional converbs (*-li* (SS) and *-(l)isi-* (DS)) in Udihe, as constituents of real conditionals, are distinguished by switch-reference. By contrast, such a syntactic distinction does not occur in conditional particles *ədəisini* and *bisi*, in which the latter conditional element mainly forms unreal conditionals. Meanwhile, the simultaneous converb in *-mi* is also employed to express same-subject real conditionals in principle. However, there is no conditional element corresponding with this converbal form in switch-reference due to the lack of DS conditional converbal ending **-rAk-*.

• real conditional

SS

- 5-11) *bi xoton-tigi ɣənə-lii, sindu konfeta-wa gada-jaŋa-i.*
 I city-DIR go-COND.CVB.SS 2SG.DAT candy-ACC buy-PTCP.FUT-1SG
 ‘If I go to the city, I will buy you some candy.’

(Nikolaeva and Tolskaya 2001: 750)

DS

- 5-12) *aŋiga-ŋiga olokto-lisi-ti, minti əmə-gi-jaŋə-fi.*
 girl-PL cook-COND.CVB.DS-3PL we.INCL come-REP-PTCP.FUT-1PL.INCL
 ‘If the girls cook the food, we will come back.’

(Nikolaeva and Tolskaya 2001: 749)

³⁹ The subjunctive suffix *-musə-* in Udihe, used in the main clause to lead to unreal conditionals interpretations, is widely observed in North and East Tungusic. However, the corresponding element is not verified in South Tungusic. Instead, past tense, perfective, and modality forms are mostly in use for the same semantic function in Tungusic on the Chinese side.

SS

- 5-13) *ə-ʃəŋə-i* *sitalə* **bisi,** *waa-ʃəŋə-i.*
NEG-PTCP.FUT-2SG adopt.child if kill-PTCP.FUT-1SG
‘If you do not adopt me (as a child), I will kill you.’

(Kazama 2004: 306)

DS

- 5-14) *si* *amba-wa* *waa-i* **bisi,** *məmi* *waa-ʃəŋə-i.*
2SG.NOM evil-ACC kill-PTCP.PRS if oneself.ACC kill-PTCP.FUT-2SG
‘If you kill the evil, you will kill yourself.’

(Nikolaeva and Tolskaya 2001: 752)

SS

- 5-15) *čaala-i* **ədəisini,** *əi* *moxo-lo* *bi-i* *gampa-wa* *uniŋa-la-ø.*
want-PTCP.PRS if this cup-LOC be-PTCP.PRS porridge-ACC spoon-VBLZ-IMP
‘If you agree, scoop the porridge which is in this cup.’

(Nikolaeva and Tolskaya 2001: 750)

DS

- 5-16) *si* *mantila-i* **ədəisini,** *bi* *budə-ʃə.*
2SG.NOM pour-PTCP.PRS if I die-FUT.1?
‘If you pour (water on me), I might die.’

(Nikolaeva and Tolskaya 2001: 750)

• **unreal conditional**

SS

- 5-17) *mamasa-xi* **bisi,** *sitə-xi=də* *ədə-musə-i* *sii.*
wife-PROP if child-PROP=CLT become-SUBJ-2SG 2SG.NOM
‘If you had a wife, you would have a child.’

(Kazama 2010a: 220)

DS

- 5-18) *si* *ni-wə=də* *gələ-ə* **bisi,** *sinəwə* *bələsi-du-musə.*
2SG.NOM who-ACC=CLT ask-PTCP.PST if 2SG.ACC help-PL-SUBJ
‘If you had asked somebody, they would have helped you.’

(Nikolaeva and Tolskaya 2001: 751)

5.3. Tungusic

In § 5.3, taking the same typological criteria (i.e., switch-reference and semantic classification) for conditionals, I lay a focus on conditional forms in the entire Tungusic languages.

5.3.1. First group

5.3.1.1. Evenki

Table 5-2. Conditional forms in Evenki

	real conditional			unreal conditional		
	SS	VS	DS	SS	VS	DS
COND.CVB	- <i>mi</i>		- <i>rAki-PERS</i>	- <i>mi</i>		- <i>rAki-PERS</i>

Nedjalkov, I.V. (1997: 54) notes that Evenki conditionals are expressed by the two conditional converbal endings *-mi* and *-rAki*⁴⁰, claiming that the two conditional converbal forms are clearly distinguished by switch-reference. This signifies that SS conditionals ((5-19), (5-21)) are formed by a same-subject conditional converb in *-mi*, whereas a different-subject conditional converb in *-rAki-* constitutes DS conditionals ((5-20), (5-22)). Concerning semantic types of conditionals, the two conditional forms can respectively form either real or unreal conditionals, as given in (5-19)-(5-24). As mentioned in Chapter IV, real conditionals are generally expected when present tense, future tense, and imperative mood are used in the main clause. In the case of unreal conditionals, the subjunctive ending *-mčA-*, corresponding with *-musə-* in Udihe, is taken in the matrix clause (cf. (5-21) to (5-24)). Furthermore, it should be noted that the two conditional converbs, directly attached to the copular verb *bi-* ‘be’, forms analytical constructions with the preceding participle verb, mostly in past tense, when the subordinate clause conveys either past or completed conditions in past tense, as illustrated in (5-22) and (5-24). In this case, the copular verb in the same-subject conditional converb is realized as *bi-mi* (be-COND.CVB.SS), used for SS conditionals. On the other hand, *bi-siki-PERS* (be-PTCP.PST.COND.CVB.DS-PERS), analyzed as the

⁴⁰ The DS conditional converb in *-rAki-* phonologically changes its form depending on the final syllable of the verb stem as follows: *-rAki-~-dAki-~tAki-~sAki-*.

past participle form of *bi-* in the different-subject converb, is adopted for DS conditionals. This phenomenon, namely different use of the copular-based verbs with the conditional converbs in **-mi* and **-rAk-* by switch-reference, occurs in other Tungusic languages (e.g., Even, Negidal, Orochi, and Uilta) as well. What has been observed from this consideration indicates that conditional elements in Evenki function on the basis of a strict contrast of the switch-reference system without any regard to the semantic type of conditionals. Nonetheless, we can confirm neither conditional converbs nor conditional particles in Evenki, which phonologically correspond with the conditional converbal suffixes *-li* (SS), *-(l)isi-* (DS) and copular-based conditional particles, individually, in Udihe.

real conditional

SS

- 5-19) *aja-t hawa-l-mi-l, bəjə-l oo-jaŋaa-sun.*
 good-INS work-INC-COND.CVB-PL person-PL become-PTCP.FUT-2PL
 ‘If [you] start to work well, you will become a person.’

(Bulatova and Grenoble 1999: 44)

DS

- 5-20) *si dolbotono mundule əmə-rəki-s,*
 2SG.NOM evening we.LOC come-COND.CVB-2SG
bi girki-wi əri-jaŋə-w.
 I friend-REF.SG call-PTCP.FUT-1SG
 ‘If you come to our place this evening, I will call my friend.’

(Nedjalkov, I.V. 1997: 54)

unreal conditional

SS

- 5-21) *asatkan-mə əjaw-mi, asila-mča-w.*
 girl-ACC love-COND.CVB marry-SUBJ-1SG
 ‘If I loved the girl, I would marry [her].’

(Nedjalkov, I.V. 1997: 55)

- 5-22) *si mindulə əmə-čə bi-mi, kətə-wə saa-mča-s.*
 2SG.NOM I.LOC com-PTCP.PST be-COND.CVB many-ACC know-SUBJ-2SG
 ‘If you had come to my place, you would have known a lot.’

(Nedjalkov, I.V. 1997: 54)

DS

5-23) *nunjan dukuwu-r-wa mindu buu-rəki-n, bi əsi taŋi-mča-w*
 he book-PL-ACC I.DAT give-COND.CVB-3SG I now read-SUBJ-1SG
 ‘If he gave me books, now I would read [them].’

(Nedjalkov, I.V. 1997: 55)

5-24) *saman iri-čaa bi-siki-n,*
 shaman cook-PTCP.PST be-PTCP.PST.COND.CVB-3SG
əŋnə-mčəə-l ilə-l bu-ŋa-rə.
 NEG-SUBJ-PL person-PL die-IMPF-PTCP
 ‘If the shaman had cooked, they would not have died.’

(Vasilevič 1936: 74)

5.3.1.2. Even

Table 5-3. Conditional forms in Even

	real conditional			unreal conditional		
	SS	VS	DS	SS	VS	DS
COND.CVB	-mi		-rAk-PERS	-mi		-rAk-PERS

As Table 5-3 illustrates, Even conditionals are formed with two conditional converbs in *-mi* and *-rAk*⁴¹. Citing two examples, (5-25) and (5-26), Malchukov (1995: 18) remarks that the conditional converb in *-rAk*- “is semantically identical to the conditional form in *-mi* (naturally, except for its role in the switch-reference system).” That is to say that the use of the conditional converbal form in Even is decided on the basis of switch-reference regardless of semantic types of conditionals. The main clauses in real conditionals generally take present tense, future tense and imperative mood, while unreal conditionals (e.g., (5-27) and (5-28)) are expected with the subjunctive mood *-mča-* in the consequent clause. Thus, it is interpreted from this previous study and the examples below that the conditional converbal suffixes *-mi* and *-rAk-* in Even vary according to conjunction or disjunction of the subjects in the subordinate and main

⁴¹ The DS conditional converbal suffix *-rAk-* also varies in accordance with the preceding verb stem as follows: *-rAk~Ak~dAk~sAk-*.

clauses, which agrees with conditional forms in Evenki. In addition, neither a contrast of conditional converbal endings, phonologically related to *-li* (SS) and *-(l)isi-* (DS) in Udihe, in terms of switch-reference nor copular-oriented conditional particles are not observed in Even as well.

• **real conditional**

SS

- 5-25) *əm-mi*, *göön-jǐ-m.*
 come-COND.CVB say-FUT-1SG
 ‘If/when [I] come, [I] tell.’

(Malchukov 1995: 18)

DS

- 5-26) *əm-rək-ə-n*, *göön-jǐ-m.*
 come-COND.CVB-E-3SG say-FUT-1SG
 ‘If/when [he] come, [I] shall tell.’

(Malchukov 1995: 18)

• **unreal conditional**

SS

- 5-27) *ini bi-mi*, *girkawač-mča-ø.*
 alive be-COND.CVB move.around-SUBJ-3SG
 ‘If it were alive, it would move around.’

(Malchukov 2008: 271)

DS

- 5-28) *ak-mu muču-rak-a-n*, *bujux-nə-mč-u.*
 older.brother-1SG return-COND.CVB-E-3SG hunt-DIRINT-SUBJ-1SG
 ‘If my older brother returned, I would go to hunt.’

(Malchukov 2008: 271)

5.3.1.3. Negidal

Table 5-4. Conditional forms in Negidal

	real conditional			unreal conditional		
	SS	VS	DS	SS	VS	DS
COND.CVB	<i>-mi</i>		<i>-jik-PERS</i>	<i>-mi</i>		<i>-jik-PERS</i>

As illustrated in Table 5-4, conditionals in Negidal are also marked by conditional converbs in *-mi* and *-jik*⁴². Ikegami (1999 (1953)) states that the conditional converbal form *-jik*- is presumed to phonologically correspond with the DS conditional converbal ending **-rAk-* in Evenki and Even. The two conditional converbal forms in Negidal coincide with North Tungusic in that the *-mi* and *-jik*- differ in switch-reference, as illustrated in (5-29), (5-30), (5-31), and (5-32). Regarding semantic parameters of conditionals, the semantic distinction between the *-mi* and the *-jik*- is not considered to exist in Negidal because both real and unreal conditionals are expressed by these conditional converbal forms on the basis of consistency of the subjects between the two clauses. This observation indicates that the conditional markers in Negidal, as confirmed in Evenki and Even, are likewise completely dependent on the switch-reference system. Furthermore, Negidal is also consistent with other North Tungusic languages in that there is neither an opposition of conditional converbs depending on switch-reference for real conditionals nor are there any copular-based conditional particles, respectively correlating with the converb in *-li* or *-(l)isi-* and *ədəisini* or *bisi* in Udihe.

• **real conditional**

SS

- 5-29) *ge, bəlat-mi, bəlat-kəl=kə.*
 INTJ help-COND.CVB help-IMP.2SG=CLT
 ‘If you help, help.’

(Kazama 2002: 121)

DS

- 5-30) *tigdəl-lixī-n, buu močüjgr-ja-wün.*
 rain-COND.CVB-3SG we.EXC return-FUT-1PL.EXC
 ‘If it rains, we will return.’

(Kazama 2002: 122)

⁴² The DS conditional converbal suffix *-jik-* in Negidal has allomorphs *-jik-/jixi-/čak-/čaxr-/sixi-/dixi-* depending on the final consonant of verb stem (Kazama 2002: 122).

• unreal conditional

SS

- 5-31) *ti n'exə-ǰe-wə-s saa-čaa bi-mii,*
 that do-PTCP.FUT-ACC-2SG know-PTCP.PST be-COND.CVB
ə-mčo-w xəlbə-jə.
 NEG-SUBJ-1SG take-PTCP

‘If I knew that you do (it) that way, I would not take (you) here.’

(Cincius 1982: 57)

DS

- 5-32) *bi=da sunǰi ǰənə-mčo-w, bəgdi-w=da*
 I=CLT 2PL.INS go-SUBJ-1SG foot-1SG=CLT
sun bəgdiə-čin=da oo-ji bi-sixi-n=da.
 2PL.GEN foot-2PL=CLT become-PTCP.PRS be-PTCP.PST.COND.CVB-3SG=CLT
 ‘If my legs were like yours, I would go with you.’

(Pevnov and Khasanova 2003: 79)

5.3.1.4. Solon

Table 5-5. Conditional forms in Solon

	real conditional			unreal conditional		
	SS	VS	DS	SS	VS	DS
COND.CVB	<i>-kki-PERS</i>			<i>-kki-PERS</i>		
COND.PART	<i>bi-kki</i>			<i>bi-kki</i>		

In Solon, a Tungusic language belonging to the Chinese territories, the conditional converbal ending *-kki-* is employed to form conditional constructions, as presented in Table 5-5. This conditional element is known to originate from the DS conditional converb in **-rAk-* in proto-Tungusic from phonological correspondence, as discussed in Ikegami (1999 (1953)). However, what is to be noted here is that the *-kki-* form in Solon, unlike the DS conditional converbal form **-rAk-* in the other first group of Tungusic, allows either same-subject or different-subject conditionals (See examples (5-33), (5-34), (5-35) and (5-36)). This demonstrates that switch-reference does not function as a syntactic device in the Solon conditional converbal suffix *-kki-*, although it is

diachronically associated with the DS conditional converbal ending **-rAk-*. Furthermore, as discussed in Chapter IV, it should be stressed that the converb in *-mi* in Solon does not serve as a conditional marker in present, future, imperative, and subjunctive sentences, which is clearly distinct from the **-mi* forms in Evenki, Even, and Negidal. As shown in the examples below, the VS conditional converb in *-kki-* can constitute both real and unreal conditionals irrespective of switch-reference, which leads us to conclude that neither syntactic nor semantic distinction exists in Solon conditional form. In addition, the conditional converbal form of the copular verb *bi-* (i.e., *bi-kki* (be-COND.CVB)), frequently in unreal conditionals, functions as a conditional particle. This judgment is based on the uninflected feature according to the person in the subordinate clause, as illustrated in (5-35) and (5-36). Consequently, the results from this investigation indicate that the conditional form *-kki-* in Solon does not rely on switch-reference and embraces not only DS but also SS conditionals, whereas the *-mi* form does not function as a conditional element. These characteristics of conditional elements decisively differ from those in the other first group of Tungusic in Russia. Additionally, it is noteworthy that the copular verb in conditional converb serves as a conditional particle, either in real or in unreal conditionals, in Solon. Still, as with other first group of Tungusic, there are no corresponding elements of the Udihe conditional converbal endings *-li* and *-(l)isi-* in Solon.

• **real conditional**

SS

- 5-33) *ədduulə-kki, uril-nii ugə-wə-n dooldii-xoldo=nee.*
 get.old-COND.CVB children-GEN words-ACC-3 listen-IMP.2PL=CLT
 ‘If you get old, listen to children’s words.’

(Kazama 2013: 414)

DS

- 5-34) *sii uli-kki-si, bii uli-ø-mi.*
 2SG.NOM go-COND.CVB-2SG I go-IMPF-1SG
 ‘If you go, I go.’

(Hu and Chaoke 1986: 79)

• **unreal conditional**

SS

5-35) *bii mugu-si bi-kki, tajaa taggəəmbə gada-ø-m=e.*
 I money-PROP be-COND.CVB that car.ACC take-IMPF-1SG=EMPH
 ‘If I had a money, I would buy that car.’

(Kazama 2013: 417)

DS

5-36) *sii ə-sə jɪŋʃɪ-m buu-r bi-kki,*
 2SG..NOM NEG-PTCP.PST say-IMPF.CVB give-PTCP be-COND.CVB
tajjaa bügü bii baxa-m ə-sin ətə-r.
 that place I find-SIM.CVB NEG-PTCP.IMPF can-PTCP
 ‘If you had not told me, I could not have found that place.’

(Kazama 2013: 417)

5.3.2. Second group

5.3.2.1. Orochi

Table 5-6. Conditional forms in Orochi

	real conditional			unreal conditional		
	SS	VS	DS	SS	VS	DS
SIM.CVB	<i>-mi</i>			<i>-mi</i>		
COND.CVB	<i>-(A)ki-PERS,</i> <i>-wi</i> <i>-ičA-PERS</i>			<i>-(A)ki-PERS</i>		

As organized in Table 5-6, the following four converbal forms (i.e., (i) the simultaneous converbal ending *-mi*, (ii) the conditional converbal ending 1 *-(A)ki*, (iii) the conditional converbal ending 2 *-wi*, and (iv) the conditional converbal ending 3 *-ičA-*) are known to make conditional constructions in Orochi. Contrary to Udihe, it deserves attention that Orochi retains DS conditional converbal suffix *-(A)ki-*, phonologically corresponding with **-rAk-* in the first group of Tungusic languages. From the switch-reference perspective, the four conditional elements in Orochi are generally divided into two types: conjunction-oriented converbs in *-mi* (SS), *-wi* (SS) and disjunction-oriented

converbs in *-ičA-* (DS), *-(A)ki-* (DS). Regarding conditional types at semantic level, real conditionals are expressed by *-mi* (SS), *-wi* (SS), and *-ičA-* (DS), *-(A)ki-* (DS)⁴³. The examples are given in (5-37) to (5-40). On the other hand, the converbs in *-mi* (SS) and *-(A)ki-* (DS), as in (5-41) and (5-42), are used to form unreal conditionals depending on switch-reference when the subjunctive mood comes to the main clause. In short, the switch-reference system, as a rule, functions as a syntactic device in Orochi conditional markers, as is the case in North Tungusic. Furthermore, Orochi is equivalent to Udihe in that the conditional converbal forms *-wi* (SS), and *-ičA-* (DS), related to *-li* and *-(l)isi-* in Udihe, show a distinction depend on switch-reference in real conditionals, which is absent in North Tungusic.

• real conditional

SS

- 5-37) *toojo aali=daa jaü=daa n'ä doogdi-maji, gun'-jəŋə-ti.*
 that.ACC=CLT when=CLT what=DAT people listen-SIM.CVB.PL say-PTCP.FUT-3PL
 'If people listen to that anyhow, they will say [it].'

(Avrorin and Boldyrev 2001: 366)

- 5-38) *sinəwə baačigi-wi, bələči-jəŋə-i.*
 2SG.ACC meet-COND.CVB help-PTCP.FUT-1SG
 'If I meet you, I will help (you).'

(Avrorin and Boldyrev 2001: 372)

DS

- 5-39) *ami-si bəjumə waa-ičaa-n'i, imuksə-wə-n'i jəb-jəŋə-si.*
 father-2SG elk.ACC kill-COND.CVB-3SG fat-ACC-3SG eat-PTCP.FUT-2SG
 'If your father hunts an elk, you will eat its fat.'

(Avrorin and Boldyrev 2001: 208)

⁴³ However, note that there is a sample of SS conditional by *-(A)ki-*, as shown in Avrorin and Lebedeva (1968). This may indicate that the degree of switch-reference in Orochi is not as strict as that of North Tungusic.

aja dəŋsi-ki-si, əgdi-wə baa-ja-si.
 good work-COND.CVB-2SG a.lot-ACC get-PTCP.FUT-2SG
 'If you work well, you will get a lot.'

(Avrorin and Lebedeva 1968: 206)

5-40) *təɬumu-wə ɡəɬə-əki-si, bii təɬumuči-ǰəŋə-ji.*
 story-ACC want-COND.CVB-2SG I narrate.story-PTCP.FUT-1SG
 ‘If you want a story, I will narrate a story (to you).’

(Avrorin and Boldyrev 2001: 203)

• **unreal conditional**

SS

5-41) *adülikaaŋ-ki bi-či bi-mi,*
 net-PROP be-PTCP.PST be-SIM.CVB
ei noso-wo waa-ǰaŋa-i bi-či=gin’i.
 this boar.ACC kill.PTCP.FUT.1SG be-PTCP.PST=CLT
 ‘If I had a net, I would hunt this boar.’

(Avrorin and Boldyrev 2001: 320)

DS

5-42) *sii uutəčəkəmi doo-du-n’i bukki bi-əki-si,*
 2SG.NOM hunting.place? inside-DAT-3SG die.PTCP.PRS be-COND.CVB-2SG
giamsa-si taa-dü bi-ǰəŋə-ni bi-či=gin’i.
 bones-2SG that-DAT be-PTCP.FUT-3SG be-PTCP.PRS=CLT
 ‘If you died inside the hunting place, your bones would leave there.’

(Avrorin and Boldyrev 2001: 320)

5.3.2.2. Hezhen

Table 5-7. Conditional forms in Hezhen

	real conditional			unreal conditional		
	SS	VS	DS	SS	VS	DS
COND.CVB	-ki-PERS			-ki-PERS		
COND.PART	odo-ki-n or da-ki-(n)			odo-ki-n or da-ki-(n)		

As shown in Table 5-7, conditionals in Hezhen, distributed on the Chinese side, are connected by the conditional converb in *-ki-PERS*. This is a corresponding form of the DS conditional suffix **-rAk-* in proto-Tungusic. However, as given in (5-43) to (5-49), this conditional converbal element in Hezhen can construct either real or unreal conditionals with no regard to switch-reference. Furthermore, there is a distinction between Hezhen and other second group of Tungusic (Udihe and Orochi), as the converb

in *-mi* in Hezhen is not used as a conditional marker. As confirmed in Solon, the copular verb *da-* or *odo-* ‘become’ in conditional converb, functioning as a conditional particle uninflected by person, is also identified in Hezhen. See examples (5-44), (5-46), (5-47), (5-48), and (5-49). Notice that there is a disparity in the type of copular verb between Hezhen and Solon. To summarize, conditional elements in Hezhen, uninfluenced by switch-reference, can function as either real or unreal conditional markers. Moreover, the conditional particles, stemming from copular verbs with the conditional converbal ending *-ki-*, are also existent in Hezhen. It is worthwhile to note that these characteristics of conditional forms in Hezhen are noticeably similar to those of Solon. Still, no conditional converbs in connection with *-li* and *-(l)isi-* in Udihe occur in Hezhen.

• **real conditional**

SS

- 5-43) *su* *ǰuru* ***soro-mači-ki,*** *turusiki* *soro-mačia-ø.*
 2PL.NOM two fight-RECP-COND.CVB outside fight-RECP-IMP
 ‘If you fight with each other, fight outside.’

(Li 2006: 74)

- 5-44) *əsi* *nio* *malxoN* ***da-ki-ni,*** *jiu* *ǰəfu-m* *goškon.*
 now person a.lot become-COND.CVB-3SG then eat-IMPF.CVB difficult
 ‘If people are a lot now, they have a difficulty in eating.’

(Li 2015: 248)

DS

- 5-45) *si* ***ənə-ki-si,*** *bi* *ənə-šə-ji.*
 2SG.NOM go-COND.CVB-2SG I go-NEG.N.PST-1SG
 ‘If you go, I do not go.’

(Li 2006: 77)

- 5-46) *dudu-ji-si* ***da-ki-n,***
 lie.down-PTCP.N.PST-2SG become-COND.CVB-3SG
nio *mannəxə* *səktəku* *səkti-rə-n.*
 person old sitting.cushion spread-N.PST-3SG
 ‘If you lie down, a person spreads an old sitting cushion.’

(Li 2012: 196)

• **unreal conditional**

SS

- 5-47) *bi yaoshi sa-yi* ***odo-ki-n=lə***, *ʃəfu-š-yi*.
 I if know-PTCP.N.PST.1SG become-COND.CVB-3SG=CLT eat-NEG.N.PST-1SG
 ‘If I had known, I would not have eaten [it].’

(Li 2006: 141)

DS

- 5-48) *anči* ***da-ki-ni***, *alipti-du* *ənə-uxən*
 NEG become-COND.CVB-3SG long.time.ago-DAT go-IMPRS.PST
 ‘If it were not like that, [one] would go a long time ago.’

(Li 2015: 245)

- 5-49) *əm xusaji səksə-wə-ni omi-qun-xə-n* ***da-ki***,
 one swan blood-ACC-3SG drink-CAUS-PTCP.PST-3SG become-COND.CVB
əi unku alibtə ai da-xa-n bi-ršə-n.
 this disease immediately good become-PTCP.PST-3SG be-NEG.N.PST-3SG
 ‘If [one] had let him drink a blood of a swan, this disease would have been cured immediately.’

(An 1986: 60)

5.3.3. Third group

5.3.3.1. Nanay

Table 5-8. Conditional forms in Nanay

	real conditional			unreal conditional		
	SS	VS	DS	SS	VS	DS
SIM.CVB	<i>-mɪ</i>					
COND.CVB	<i>-pɪ</i>			<i>-OčɪA-PERS</i>		
COND.PART	<i>osɪnɪ</i>			<i>osɪnɪ, bimčə(ni)</i>		

Table 5-8 introduces five conditional forms in Nanay, namely (i) the simultaneous converbal ending *-mɪ*, (ii) the conditional converbal ending 1 *-pɪ*, (iii) the conditional converbal ending 2 *-OčɪA-PERS*, and (iv) the conditional particle 1 *osɪnɪ*, and (v) the conditional particle 2 *bimčə(ni)*. Note that Nanay does not maintain the corresponding

form of the DS conditional converb in **-rAk-*, as is the case in Udihe. Judging from the perspective of switch-reference, there are three types of conditional elements in Nanay: conjunction-oriented conditional converbs in *mɪ* (SS) and *-pɪ* (SS), disjunction-oriented conditional converb in *-OčɪA-* (DS)⁴⁴, and non-switch-reference-oriented conditional particles *osmɪ* (VS), *bimčə(ni)* (VS). The conditional converbal form 1 *-pɪ* (SS) is known to be different from the conditional converbal form 2 *-OčɪA-* (DS) with regard to switch-reference (cf. (5-51) and (5-52)). As with Udihe, nevertheless, there is no DS conditional element for the converb in *-mɪ* due to the lack of the DS conditional converb in **-rAk-*. Rather, the two conditional particles *osmɪ* and *bimčə(ni)* (respectively speculated to be the participle present form of verb *osi-* ‘become’ and the subjunctive form of copular verb *bi-* ‘be’ and both with the 3SG personal ending *-ni*) are employed either in SS or in DS conditional constructions. However, these two conditional forms, absences of an inflection according to the person in the subordinate clause, serve as VS conditional particles, as found in examples (5-53)-(5-58). Regarding semantic types of conditionals, the conditional forms *-mɪ* (SS), *-pɪ* (SS) and *osmɪ* (VS), *-OčɪA-* (DS) are used to form real conditionals, while *osmɪ* (VS) or *bimčə(ni)* (VS) creates unreal conditionals. As observed in other Tungusic languages above, unreal conditionals in Nanay are generally created when the subjunctive mood *-mčA-* appears in the main clause. Just as the conditional elements (*-li* (SS), *-(l)isi* (DS)) in Udihe and (*-wi* (SS), *-ičA-* (DS)) in Orochi, there is an opposition of switch-reference in conditional converbal endings *-pɪ* (SS) and *-OčɪA-* (DS) as constituents of real conditionals in Nanay. In addition, Nanay agrees with Udihe in that the conditional converbal element in opposition to the converb in *-mɪ* is nonexistent due to the lack of **-rAk-*. Instead, the two Eastern Tungusic languages have copular-centered conditional particles in common, which regardless of switch-reference, can combine with the subjunctive suffix to create unreal conditionals.

• real conditional

SS

5-50) *piktə ʃəmusi-lu-mi, (nəə) sɔŋgo-ʃaraa-ø.*

child be.hungry-INC-SIM.CVB at.once cry-FUT-3

‘If a child gets hungry, he will cry at once.’

(Kazama 2011a: 122)

⁴⁴ Kazama (2011a) specifically refers to the syntactic and semantic differences of these following conditional converbal forms *-pɪ*, *osmɪ*, *-OčɪA-* in Nanay.

5-51) *tai əktə ča-wa ičə-pi, ənim-bi joongo-ı-nı.*
 that woman that-ACC see-COND.CVB mother-REF.SG remember-PTCP.PRS-3SG
 ‘If that woman sees that, she thinks of her mother.’

(Kazama 2010b: 244)

DS

5-52) *čımana tugdə-učıa-ni, mii ənə-əsım-bi.*
 tomorrow rain-COND.CVB-3SG I go-PTCP.PRS.NEG-1SG
 ‘If it rains tomorrow, I do not go.’

(Kazama 2010b: 245)

SS

5-53) *agda-ası osını, ičə-ndə-ruu.*
 believe-NEG.PRS if see-DIRINT-IMP
 ‘If you do not believe, go to see.’

(Kazama 2011a: 130)

DS

5-54) *nixəli-əsi osını, mii mənə njaqıl-çı ənə-ğəm-bi.*
 open-NEG.PRS if I oneself cousin-DIR go-FUT-1SG
 ‘If you do not open, I will go to my cousin.’

(Kazama 2011a: 131)

• **unreal conditional**

SS

5-55) *buə piktə-pu bi-či-n osini=ka, siniəčiə=ka o-mča-ø=ma.*
 we child-1PL be-PTCP.PST-3SG if=CLT 2SG.DIR=CLT become-SUBJ-3=CLT
 ‘If our child were alive, he would be like you.’

(Avrorin 1981: 73)

DS

5-56) *sii ji-či-si osını,*
 2SG.NOM come-PST.PTCP-2SG if
mii ərdəngə mədə-wə gisurə-mčə-i.
 I interesting news-ACC tell-SUBJ-1SG
 ‘If you had come (to me), I would have told you an interesting news.’

(Avrorin 1961: 251)

SS

5-57) *čixala-i* ***bi-mčə-ni***,
 want-PTCP.PRS.2SG be-SUBJ-3SG
to mi piktə-ji-i=wə asila-mčə-si.
 PART 1SG.GEN daughter-INS-1SG=CLT marry-SUBJ-2SG
 ‘If you wanted, you would marry my daughter.’

(Avrorin 1961: 251)

DS

5-58) *adoli-pu* *sikun* *bi-či-n* ***bi-mčə-ni***,
 fishing.net-1PL new be-PTCP.PST-3SG be-SUBJ-3SG
buə əgdi sogdata-wa wa-mčə-pu.
 we a.lot. fish-ACC kill-SUBJ-1PL
 ‘If our fishing net had been new, we would have hunted a lot of fish.’

(Avrorin 1961: 251)

5.3.3.2. Ulcha

Table 5-9. Conditional forms in Ulcha

	real conditional			unreal conditional		
	SS	VS	DS	SS	VS	DS
SIM.CVB	<i>-mɪ</i>					
COND.CVB	<i>-pɪ</i>			<i>-wəčA-PERS</i>		
COND.PART	<i>osɪnɪ</i>			<i>bimčə(n)</i>		

In Ulcha, there are five conditionals forms (i.e., (i) the simultaneous converbal ending *-mɪ*, (ii) the conditional converbal ending 1 *-pɪ*, (iii) the conditional converbal ending 2 *-wəčA-PERS*, (iv) the conditional particle 1 *osɪnɪ*, and (v) the conditional particle 2 *bimčə(n)*) used for conditional constructions, as given in Table 5-9. Ulcha does not have a corresponding form of the conditional converbal suffix **-rAk-*, which matches with Udihe and Nanay. Furthermore, Ulcha and Nanay agree that real conditional forms are divided into three types by switch-reference; conjunction-oriented conditional forms *-mɪ* (SS) and *-pɪ* (SS), disjunction-oriented conditional form *-wəčA-* (DS), and non-switch-reference-oriented: *osɪnɪ* (VS) in present, future, imperative sentences. As found in (5-60) and (5-61), the conditional converb in *-pɪ* (SS) is opposed to the conditional converb in *-wəčA-* (DS) by switch-reference. Nevertheless, as

mentioned in Udihe and Nanay, a corresponding DS conditional element for the converbal form *-mi* does not occur, which results from the loss of the DS conditional converbal ending **-rAk-*. In Ulcha, instead, there are two conditional particles *osmı* and *bimčə(n)*. First, the particle *osmı* (*osı-ı-nı*: become-PTCP.PRS-3SG), presumed to stem from participle present form of the copular verb *osı-* ‘become’ in the third person singular, mainly expresses real conditional constructions in VS circumstances, as in (5-62) and (5-63). On the other hand, unreal conditionals are marked by the other conditional particle *bimčə(n)* when either subjunctive 1 *-mčA-* or subjunctive 2 *-(r)ılAxA(n)-* is used in the main clause, as in examples (5-64), (5-65), and (5-66). The *bi-mčə-n* (be-SUBJ-3SG) is considered to originate from the subjunctive form of the copular verb *bi-* ‘be’ in the third person singular. According to Kazama (2010c: 128-129), some Ulcha consultants use different personal endings depending on the person of the subject in the subordinate clause, as illustrated in (5-64). However, he remarks that most Ulcha speakers nowadays take *bimčən* only with no regard to the person in the antecedent clause, which can be defined as a particle element from this uninflected characteristic, as indicated in (5-65). Following these descriptions and examples below, the author can judge that the conditional marker *bimčən* can form unreal conditionals without any regard to switch-reference. To summarize, similar to Udihe and Nanay, Ulcha has an opposition of switch-reference in the use of conditional converbal endings *-pı* (SS) and *-wučA-* (DS) within real conditionals, whereas there is no corresponding conditional element for the SS converb in *-mı*. Furthermore, copular-based conditional particles *osmı* and *bimčən*, characterized as VS markers, are respectively used to express real and unreal conditionals.

• real conditional

SS

- 5-59) *xai=daa manga-wa-nı baka-mı, mimbə xəərçi-səəri.*
 what=CLT difficulty-ACC-3SG find-SIM.CVB I.ACC call-FUT.IMP.2SG
 ‘If [you] find any difficulty, call me out.’

(Kazama 2006c: 117)

- 5-60) *tıı biruu-ti ɣənə-pi, bak-ıla-tı.*
 that village-DIR go-COND.CVB find-FUT-3PL
 ‘If [they] go to that village, [they] will find [it].’

(Kazama 2010c: 132)

DS

- 5-61) *sin xaa-woča-si, tɪ mapa wən-dilə.*
2SG.GEN bring.boat.alongside-COND.CVB-2SG that grandfather say-FUT.3
'If you bring a boat alongside, that grandfather will say.'

(Kazama 2010c: 133-134)

SS

- 5-62) *mimbə uləəsii osɪnɪ,*
I.ACC like.PTCP.PST.2SG if
xal-wa, kuumbi čaalɪ-raa ʒololo-ɾoo.
what-ACC breast.REF cut.out-ANT.CVB throw-IMP.2SG
'If you like me, cut out your breast and throw it.'

(Kazama 2006c: 137)

DS

- 5-63) *ʒuənʒii əuʒuisi osɪnɪ, sumbə čɔpal waajɪ-lam-bɪ.*
two descend.PTCP.PRS.2SG if 2PL.ACC all kill-FUT-1SG
'If you descend, [I] will kill you all here.'

(Kazama 2006c: 95)

• unreal conditional

SS

- 5-64) *min am-bɪ tɪ-dʊ bi-mčə-n, bələč-iləxə-ni=guni.*
my father-1SG that-DAT be-SUBJ1-3SG help-SUBJ2-3SG=CLT
'If my father were there, [he] would have helped.'

(Kazama 2010c: 128)

- 5-65) *bii saa-ɾɪ bi-mčə-n, bələč-iləxəm-bi.*
I know-PTCP.PRS be-SUBJ1-3SG help-SUBJ2-1SG
'If I knew, I would help.'

(Kazama 2010c: 129)

DS

- 5-66) *min ana bi-mčə-i, amba iktə-du-ni bi-iləxə-si.*
I.GEN NEG be-SUBJ1-1SG devil tooth-DAT-3SG be-SUBJ2-2SG
'If I were not, you would have been stuck at devil's teeth.'

(Kazama 2010c: 129)

5.3.3.3. Uilta

Table 5-10. Conditional forms in Uilta

	real conditional			unreal conditional		
	SS	VS	DS	SS	VS	DS
COND.CVB	<i>-mi</i>		<i>-rai-PERS</i>	<i>-mi (?)</i>		<i>-rai-PERS</i>
	<i>-pee</i>		<i>-kuta-PERS</i>	<i>-pee</i>		<i>-kuta-PERS</i>

As illustrated in Table 5-10, Ikegami (2001 (1959)) explains that there are four conditional converbal elements in Uilta, namely (i) SS temporal-conditional converbal ending 1 *-mi*, (ii) SS temporal-conditional converb ending 2 *-pee*, (iii) DS temporal-conditional converb ending 1 *-rai-*, (iv) DS temporal-conditional converb ending 2 *-kuta-*. Furthermore, he comments that the converbs in *-mi* (SS), *-rai-* (DS) and *-pee* (SS), *-kuta-* (DS) are respectively differentiated relying on unfinished or finished condition in the subordinate clause. Examples are presented below in (5-67)-(5-69). Unlike the other Tungusic languages in the third group, Uilta uniquely retains the conditional converbal form *-rai-* (< **-rAk-*), which forms either real or unreal conditionals in DS circumstances with subjunctive mood in the main clause (see (5-70) and (5-73)). In addition, any copular-based conditional particles are not verified in Uilta, unlike Udihe, Nanay, and Ulcha. Based on two typological parameters of conditionals in this study, I can conclude that the employment of conditional forms in Uilta are conditioned by switch-reference, namely (i) *-mi* (SS), *-rai-* (DS) for unfinished condition and (ii) *-pee* (SS), *-kuta-* (DS) for finished condition, as either real or unreal conditionals⁴⁵. It is remarkable, however, that the conditional converbs in *-pee* (SS) and in *-kuta-* (DS), judging from the examples from Magata (1981), Ikegami (2001(1959), 2002b) and Ozolinja (2013), show an opposition of switch-reference in completed unreal conditionals as well, which does not

⁴⁵ Note that the example of unreal conditional with the employment of the converbal ending *-mi*, conditioned by subjunctive mood in the main clause, is not identified according to the author's observation in Uilta. Nonetheless, the author supposes that there is a possibility of creating unreal conditionals using the SS converb in *-mi*, judging from the strict switch-reference system against the DS converb in *-rai-*.

conform to a contrast of conditional converbs, limited to real conditionals, in other East Tungusic languages. Hence, the author concludes that two sets of conditional converbs in Uilta are strictly opposed by switch-reference, similar to North Tungusic.

• **real conditional**

SS

- 5-67) *itə-mi, saa-ri-wi.*
 see-SIM.CVB know-PTCP.PRS-1SG
 ‘If I see (it), I will know (what it is).’

(Ikegami 2001 (1959): 32)

- 5-68) *tari nari sinda-pee, jə-wə iččee-ni.*
 that man come-COND.CVB this-ACC see+PRS-3SG
 ‘If that man has come, he will see this.’

(Tsumagari 2009b: 17)

DS

- 5-69) *tari nari sinda-uta-nnee, bii ηənnē-wi.*
 that man come-COND.CVB-3SG I go+PRS-1SG
 ‘If that man has come, I will go.’

(Tsumagari 2009b: 17)

- 5-70) *tari nari sindaayi-ni, bii ηənnē-wi.*
 that man come-COND.CVB-3SG I go+PRS-1SG
 ‘If that man comes, I will go.’

(Tsumagari 2009b: 17)

• **unreal conditional**

SS

- 5-71) *tari pəttəə waanji-pee, waari-laxa-ni.*
 that seal.ACC kill.DIRINT-COND.CVB kill-SUBJ-3SG
 ‘If [he] went to kill that seal, [he] would kill (it).’

(Ozolinja 2013: 320)

DS

- 5-72) *si əčči uundə bi-uutə-si, bi əsi-ləxə-mbi saa-ra.*
 2SG.NOM NEG say be-COND.CVB-2SG I NEG-SUBJ-1SG know-PTCP
 ‘If you had not said, I would not have known [that].’

(Magata 1981: 50)

5-73) *nooni dug-du beeji-ni, ŋənnəe-ləxə-mbi bi-čči.*
 (s)he house-DAT be+COND.CVB-3SG go+PRS -SUBJ-1SG be-PTCP.PST
 ‘If [he] had been at home, [I] would have gone there.’

(Ikegami 2001(1959: 30))

5.3.4. Fourth group

5.3.4.1. Manchu

Manchu retains the conditional converb in *-čči* to form conditionals, which diachronically corresponds with the DS conditional converbal ending **-rAk-* in other Tungusic languages, as raised by (Ikegami 1999 (1953)). Nevertheless, this conditional converbal form, as illustrated in (5-74)-(5-77), can constitute either real or unreal conditionals with no regard to switch-reference, conforming to the conditional converbal endings *-kki-* and *-ki-* in Solon and Hezhen. Furthermore, the converb in *-mə*, a corresponding converbal form of **-mi* in other Tungusic languages, does not function as a conditional marker, which is consistent with other Tungusic languages also located within the Chinese border. In addition, the copular verbs *bi-* ‘be’ or *o-* ‘become’ in a conditional converb, i.e., *bi-čči* and *o-čči*, are employed to form either real or unreal conditionals, as shown in (5-75), (5-77), (5-78), and (5-79). These conditional elements can be attached to a variety of constituents (noun, adjective, and verb predicate) in sentences and function similar to conditional particles.

Table 5-11. Conditional forms in Manchu

	real conditional			unreal conditional		
	SS	VS	DS	SS	VS	DS
COND.CVB	<i>-čči</i>			<i>-čči</i>		
COND.PART	<i>bi-čči or o-čči</i>			<i>bi-čči or o-čči</i>		

• real conditional

SS

5-74) *tačiku də dosi-čči, kičə-mə tači-ø.*
 school DAT enter-COND.CVB try.hard-SIM.CVB study-IMP
 ‘If you enter a school, study hard.’

(Avrorin 2000: 207)

5-75) *gənə-rakū* ***o-či***,

go-PTCP.IMPF.NEG become-COND.CVB

uthai gənə-rakū sə-mə həndu-ø.

then go-PTCP.IMPF.NEG say-IMPF.CVB say-IMP

‘If you do not go, then say that you do not go.’

(Zaxarov 1879: 199)

DS

5-76) ***tookabi-či***, *suwəmbə gəmu tanta-mbi.*

procrastinate-COND.CVB 2PL.ACC all beat-IMPF

‘If you procrastinate, I shall beat you all.’

(Gorelova 2002: 441)

5-77) *ədun naka-rakū* ***o-či***,

wind stop-PTCP.IMPF.NEG become-COND.CVB

jai jabu-mə mutə-rakū o-mbi.

further go-IMPF.CVB be.able-PTCP.IMPF.NEG become-IMPF

‘If a wind does not stop, one cannot move forward.’

(Avrorin 2000: 207)

• **unreal conditional**

SS

5-78) *sa-ha* ***bi-či***,

know-PTCP.PST be-COND.CVB

aifini simbə tuwa-nji-rakū bi-hə-o.

earlier 2SG.ACC see-DIRINT-PTCP.IMPF.NEG be-PTCP.PFV-Q

‘If I had known, I would have gone to you earlier.’

(Möllendorff 1892: 36)

DS

5-79) *bithə ara-rakū* *bi-hə* ***bi-či***,

letter write-PTCP.IMPF.NEG be-PTCP.PFV be-COND.CVB

ama gənə-rakū o-mbi-hə.

father go-PTCP.IMPF.NEG become-IMPF-PTCP.PFV

‘If I had not written a letter, my father would not have gone.’

(Li 2000: 363)

5.3.4.2. Sibe

As far as Sibe, spoken in Xinjiang Uyghur autonomous region, is concerned, there are two conditional forms, namely (i) the imperfective converbal ending *-mə* and (ii) the conditional converbal ending *-č̣i*. As discussed in Chapter IV, the imperfective converb in *-mə*, either in present or imperative sentences, is used in conditionals, which is remarkably different from the corresponding forms in Solon, Hezhen, and Manchu from the Northern Chinese region. Nonetheless, the conditional converb in *-č̣i*, related to the DS conditional converbal form **-rAk-* in the Tungusic of the Russian territories, more generally functions as a SS or DS conditional marker like other South Tungusic languages, as in the examples (5-80) and (5-82). Additionally, the copula verbs *o-* ‘become’ or *bi-* ‘be’, attached by the conditional converb in *-č̣i*, express either real or unreal conditionals, as given in (5-81), (5-83), (5-84), (5-85), (5-86), and (5-87).

Table 5-12. Conditional forms in Sibe

	real conditional			unreal conditional		
	SS	VS	DS	SS	VS	DS
IMPF.CVB	<i>-mə</i>					
COND.CVB	<i>-č̣i</i>			<i>-č̣i</i>		
COND.PART	<i>bi-č̣i or o-č̣i</i>			<i>bi-č̣i or o-č̣i</i>		

• real conditional

SS

- 5-80) *göiti ĵohun-d təsə-w tuŋal-q, afx-yə?*
suddenly road-DAT that.PL-ACC run.into-COND.CVB do.what.PTCP=CLT
‘If we suddenly run into them on the road, what will we do.’

(Sameng et al. 2010: 328)

- 5-81) *εi xustulum tačir o-č̣ə,*
2SG.NOM hard study.IMPF.PTCP become-COND.CVB
εiram am tačqu-d doεy-m mutu-m.
future big school-DAT enter-IMPF.CVB be.able-IMPF
‘If you study hard, you will be able to enter an university in the future.’

(Li and Zhong 1986: 96)

DS

- 5-82) *xi mini gisun-b dahə-m iqihia-qi,*
2SG.NOM I.GEN word-ACC follow-IMPF.CVB do-COND.CVB
bi əli-m gia-m.
I receive-IMPF.CVB take-IMPF
‘If you follow my words, I will take [it].’

(Li et al. 1982: 55)

- 5-83) *εi tərə-w axdərqu o-či,*
2SG.NOM that-ACC believe.PTCP.IMPF.NEG become-COND.CVB
tər εinb gəl axdərqu.
that.NOM 2SG.ACC also believe.PTCP.IMPF.NEG
‘If you do not believe him, he does not believe you as well.’

(Li and Zhong 1986: 118)

unreal conditional

SS

- 5-84) *čihəsə jəmxi εi aiqa tačiqu o-či,*
yesterday evening 2SG.NOM if study.PTCP.IMPF.NEG become-COND.CVB
εi ai arə-m bi-hə-ηə.
2SG.NOM what do-IMPF.CVB be-PTCP.PFV-NMLZ
‘If you had not studied yesterday evening, what would have you done?’

(Chaoke 2006: 333)

- 5-85) *aiqa bi əmdan johun födjih bi-či,*
if I once route ask.PTCP.PFV be-COND.CVB
viəlivəqu bi-hə.
get.lost.PTCP.IMPF.NEG be-PTCP.PFV
‘If I had asked for a direction, I would have not gotten lost.’

(Chaoke 2006: 335)

DS

- 5-86) *tər mind aləqu o-čə,*
that I.DAT notify.PTCP.IMPF.NEG become-COND.CVB
bi čind aləqu bi-xə.
I 2SG.DAT notify.PTCP.IMPF.NEG be-PTCP.PFV
‘If he had not notified to me, I would not have notified to you.’

(Li and Zhong 1986: 132)

5-87) *aiqa aha daqu ohu bi-či,*
 if rain fall.NEG.IMPF.PTCP become be-COND.CVB
bi talərd jaq ji-m gənə-m bi-hə.
 I outside.DAT thing eat-IMPF.CVB go-IMPF be-PTCP.PFV
 ‘If it had not rained, I would have gone outside to eat.’ (Chaoke 2006: 333)

5.3.5. Summary

Having employed the two typological parameters (i.e., switch-reference and semantic types) for conditionals, the present chapter has clarified differences in conditional forms among the Tungusic languages. Table 5-13 summarizes the results of this study on the basis of geographical distribution of Tungusic.

First of all, conditional constructions in Evenki, Even, and Negidal, both real and unreal, are formed with the corresponding elements of two conditional converbal endings: **-mi* (SS) and **-rAk-* (DS). These conditional elements present a strict contrast of switch-reference without regard to semantic difference. Conversely, such a syntactic distinction, according to conjunction or disjunction of the subjects in the antecedent and main clauses, does not function at all in conditional forms of South Tungusic languages (Solon, Hezhen, Manchu, and Sibe) inside the Chinese border, although conditional elements, phonologically corresponding with the DS conditional converbal suffix (<**-rAk-*) in proto-Tungusic, occur in these languages. Furthermore, conditional particles, consisting of copular verbs in conditional converbs, are also commonly observed in Tungusic on the Chinese side. In addition, it should be emphasized that the converbal ending **-mi* in South Tungusic languages, excluding Sibe, does not serve as a conditional marker. These characteristics of conditional elements in South Tungusic are clearly inconsistent with those of North Tungusic. Lastly, as illustrated in Table 5-12, East Tungusic universally possesses an extra pair of conditional converbal endings, namely **-pi* (SS) and **-bučA-* (DS)⁴⁶ proposed by the author, depending on the

⁴⁶ It appears difficult to establish the phonological correspondence between *-li* (U) and *-pɪ* (Nn, Ol), *-pee* (Ut), *-wi* (Oc) due to the fact that the consistency between *-l* and *-p* is unlikely. However, similar phonological correspondence exists in the purposive converb form *-lA(gA)-* (U) and, *-bdA-* (Ol), *-(pO)gO-* (Nn), *-buddu-* (Ut), and *-(A)lA(k)A-* (Oc). We can attest that *-l* in Udihe corresponds with *-p* (Nn) and *-b* (Ol, Ut) in the third group of Tungusic. The DS conditional endings *-wočA-* (Ul), *-OčɪA-*

Table 5-13. Conditional forms in Tungusic from the perspective of switch-reference and conditional types (DS conditional converb ***-rAk-** in bold)

		real conditional			unreal conditional		
		SS	VS	DS	SS	VS	DS
N.T.	Ek (I)	<i>-mi</i>		-rAki-	<i>-mi</i>		-rAki-
	E (I)	<i>-mi</i>		-rAk-	<i>-mi</i>		-rAk-
E.T.	N (I)	<i>-mi</i>		-jik-	<i>-mi</i>		-jik-
	Ol (III)	<i>-mɪ,</i> <i>-pɪ</i>	<i>osmɪ</i>	∅ <i>-wɔčA-</i>	<i>bimčə(n)</i>		
	Nn (III)	<i>-mɪ,</i> <i>-pɪ</i>	<i>osmɪ</i>	∅ <i>-OčɪA-</i>	<i>osmɪ, bimčə(ni)</i>		
	Oc (II)	<i>-mi,</i> <i>-wi</i>		-(A)ki- , <i>-(i)čA-</i>	<i>-mi</i>		-(A)ki-
	Ut (III)	<i>-mi,</i> <i>-pee</i>		-rai- , <i>-(k)uta-</i>	<i>-mi (?)</i> <i>-pee</i>		-rai- , <i>-kuta-</i>
	U (II)	<i>-mi,</i> <i>-li</i>	<i>bisi</i>	∅ <i>-(l)isi-</i>	<i>bisi</i>		
S.T.	S (I)		-kki- <i>(bi-kki)</i>		-kki- <i>(bi-kki)</i>		
	Hz (II)		-ki- <i>(odo-ki-n</i> <i>or da-ki-n)</i>		-ki- <i>(odo-ki-n</i> <i>or da-ki-n)</i>		
	M (IV)		-či <i>(bi-či</i> <i>or o-či)</i>		-či <i>(bi-či</i> <i>or o-či)</i>		
	Sb (IV)	<i>-mə</i>	-či <i>(bi-či</i> <i>or o-či)</i>		-či <i>(bi-či</i> <i>or o-či)</i>		

(Nn), *-(i)čA-* (Oc), *-(l)isi-* (U), and *-kuta-* (Ut) can be likely reconstructed to **-bučA-* on the basis of phonological rule.

occurrence of switch-reference. This is most often restricted to real conditionals, excluding Uilta. This contrast is not manifested in North and South Tungusic languages. The conditional converbal endings *-pee* and *-kutA-* in Uilta, unlike other East Tungusic languages, combine with the subjunctive mood in the main clause to constitute SS and DS unfinished unreal conditionals respectively. The DS conditional converbal ending in East Tungusic, presumed to be analyzed as **-bu-čA-* (CAUS-PTCP.PST-PERS), likewise retains the causative suffix **-bu-*, which requires a different subject in the antecedent and subsequent clauses. Note that the suffix **-bu-* in the DS converb no longer functions as a causative suffix, simply denoting a different subject in this case⁴⁷.

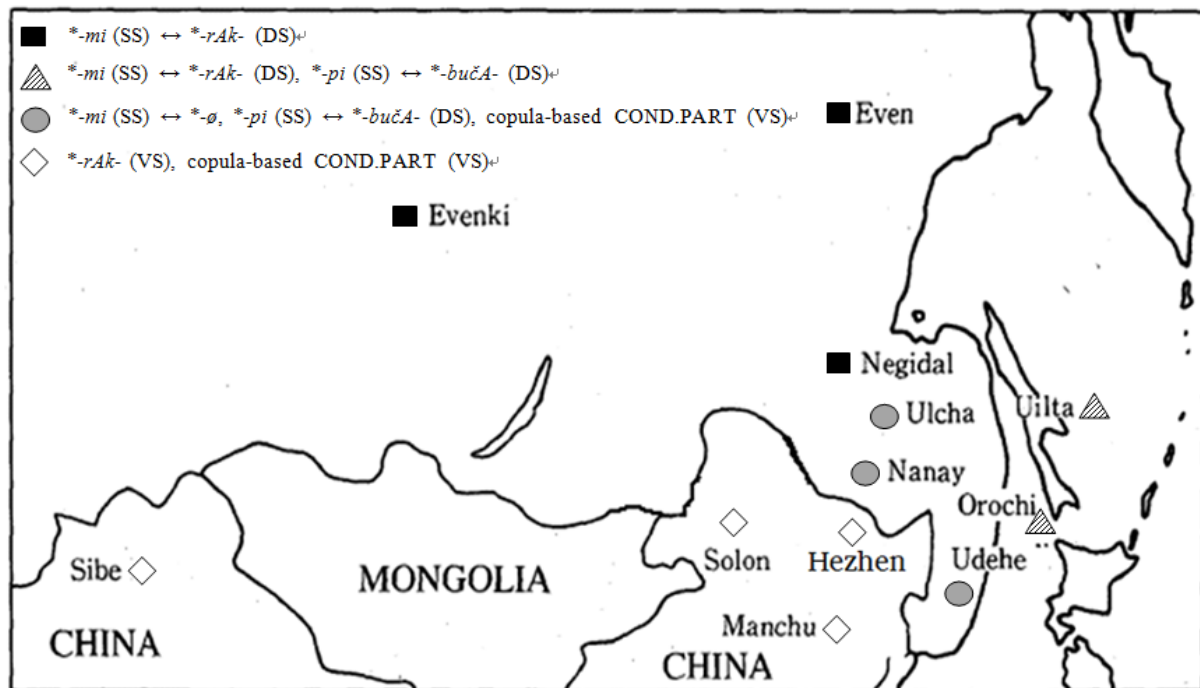
Furthermore, East Tungusic can be divided into two groups on the basis of retention of the DS conditional converbal form **-rAk-*. The first group (consisting of Nanay, Ulcha, and Udihe), which has lost the DS conditional converbal ending **-rAk-*, retains both switch-reference-oriented conditional converbs (**-mi* (SS), **-pi* (SS), **-bučA-* (DS)) and non-switch-reference-oriented conditional particles (*osmı* (Ol, Nn) < **osi-ı-nı*: become-PTCP.PRS-3SG, *bisi* (U) < **bi-si*: be-PTCP.PST)) in real conditionals. On the other hand, unreal conditionals, formed with copular-based conditional particles (*osmı*, *bimčə(ni)* (Ol, Nn), *bisi* (U)), are not influenced by switch-reference. In other words, we can attest that an opposition of switch-reference functions partially in conditional forms in these Tungusic languages. Meanwhile, there is no corresponding DS conditional element for the converb with **-mi* in these Tungusic languages, a fact presumed to stem from the loss of the DS conditional converbal suffix **-rAk-*. Turning to the second group of East Tungusic languages, containing Orochi and Uilta, we see that these retain the corresponding suffix **-rAk-*, and have been confirmed to fundamentally use two sets of different conditional converbal endings in accordance with switch-reference.

Consequently, as summarized in Map 5-1, the differences in conditional forms among Tungusic, from the viewpoint of switch-reference and semantic types of conditionals, are presumed to be attributed to areal distribution of Tungusic (in particular North and South). Within East Tungusic, the occurrence of the DS conditional

⁴⁷ Interestingly, the marking of a different subject using a causative suffix in a converb is also reported in the adjacent Nivkh language (Nedjalkov and Otaina 2013).

converbal form **-rAk-* is also considered to be associated with distinctions of conditional forms.

Map 5-1. Differences of conditional forms in Tungusic



5.4. Neighboring languages

In the previous section, I have discussed the differences in conditional elements among Tungusic by adopting switch-reference and semantic classifications for conditionals. Furthermore, § 5.4 examines conditional markers in the neighboring languages (Kolima Yukaghir, Sakha, Russian, and Mongolic (Buryat, Dagur, and Khalkha)), applying the same parameters.

5.4.1. Kolima Yukaghir

Table 5-14. Conditional forms in Kolima Yukaghir

	real conditional			unreal conditional	
	SS	VS	DS	SS	VS
COND.CVB	<i>-ŋide</i>		<i>-gene</i>	<i>-ŋide</i>	<i>-gene</i>

As illustrated in Table 5-14, conditional forms in Kolima Yukaghir strictly rely on the switch-reference system with no regard to semantic classification. Same-subject conditionals (5-88) and (5-90), for instance, are formed with the SS conditional converb in *-ŋide*, whereas the DS conditional converb in *-gene* is used to express different-subject conditionals (5-89) and (5-91). The strict opposition of conditional forms by switch-reference in Kolima Yukaghir is equivalent to North Tungusic.

• **real conditional**

SS

- 5-88) *el+jubege-ŋide*, *tet-ek* *lek-te-me*.
 NEG+stuff.oneself-COND.CVB.SS you-PRED eat-FUT-OF.1SG
 ‘If I do not stuff myself, I will eat you.’

(Maslova 2003: 164)

DS

- 5-89) *epie* *arqa* *l’e-l-u-gene*, *met-kele nilgi* *el+peššej-t*.
 grandmother near be-1-E-COND.CVB.DS I-ACC nobody NEG+throw-FUT(NEG.3SG)
 ‘If I am near my grandmother, nobody will leave me alone.’

(Maslova 2003: 393)

• **unreal conditional**

SS

- 5-90) *juø-l’el-ŋide*, *m-et ajii-nu-l’el-ŋa*.
 see-INTR-COND.CVB.SS AFF-IRLIS-shoot-IMP-3PL:TR
 ‘If they had seen (this), they would have been shooting.’

(Maslova 2003: 171)

DS

- 5-91) *abute-č-aa-l’el-gene*, *m-et+jerqoge-jek*.
 pour-ITER-INGR-INTR:1-COND.DS AFF-IRLIS-move-INTR.2SG
 ‘If I were to start to pour out (now), you would move.’

(Maslova 2003: 397)

5.4.2. Sakha

Concerning Sakha, spoken in the northern Siberian region, Stachowski and Menz (1998: 426) state that “conditionals are formed with the irreal condition suffix *-tAr*,

negative *-bAtAr*, followed by pronominal personal markers, or with the real condition suffix *-tax*, negative *-bAtAX*, followed by the personal markers.” In other words, different conditional suffixes, as in Table 5-15 and examples (5-92)-(5-95), are taken according to the semantic type of conditionals, whereas the switch-reference system does not serve as a syntactic device in Sakha. Notice that the copular verb *buol-* ‘become’ in Sakha, attached by the irreal conditional element *-tAr*, occurs as a conditional particle in unreal conditionals. Examples are given in (5-94) and (5-95).

Table 5-15. Conditional forms in Sakha

	real conditional			unreal conditional		
	SS	VS	DS	SS	VS	DS
COND	<i>-tAx</i>			<i>-tAr</i>		
COND.PART				<i>buol-lar</i>		

• **real conditional**

SS

- 5-92) *taba-nan bar-dax-xuu-na,* 5-6 *xonug-u buha ajannuuu-gun.*
 reindeer-INS go-COND.RLIS-2SG-PTCP 5-6 overnight-ACC through travel.PRS-2SG
 ‘If you go on a reindeer, you will travel 5-6 nights.’ (Ebata 2011: 204)

DS

- 5-93) *ara-m kel-lex-ine,* *manuu tuttar-aar.*
 father-1SG come-COND.RLIS-3SG this.ACC give.IMP-FUT.2SG
 ‘If my father comes, give this [to him].’
 (Ebata and Popova 2006: 67)

• **unreal conditional**

SS

- 5-94) *öskötün jol taah-uun bul-ar-um buol-lar,*
 if happiness stone-3SG.ACC find-PTCP.PRS-1SG become-IRLIS.COND
min biir-i ere kördöh-üöm ete.
 I one-ACC CLT ask.for-PTCP.FUT.1SG COP.PST
 ‘If I had found a stone of happiness, I would have asked for one.’
 (Ebata and Popova 2006: 68)

DS

5-95) *saatar suorʁan-u ilʃ-e bar-but-um buol-lar,*
 at.least blanket-ACC bring-IMP.F.CVB go-PTCP.PST-1SG become-COND.IRLIS
barar en tumnuj-uay suora ete.
 perhaps you.SG.NOM feel.cold-PTCP.FUT.2SG NEG COP.PST
 ‘If I had brought a blanket at least, perhaps you would not feel cold.’

(Ebata fielddata)

5.4.3. Russian

Table 5-16. Conditional forms in Russian

	real conditional			unreal conditional	
	SS	VS	DS	SS	VS
IMPF/PFV.GRD	<i>-ja/-v</i>				
COND marker	<i>esli</i>			<i>esli by</i>	

In Russian, conditionals are basically formed with the following two conditional forms: (i) the imperfective gerund in *-ja/v* and (ii) the conditional conjunction *esli* ‘if’. The gerund suffixes *-ja/-v*, limited to the literary style, can denote same-subject conditionals only, as in (5-96) and (5-97). On the contrary, the conditional marker *esli* is organized as a VS conditional marker because it is employed to form either SS or DS conditionals. From the perspective of semantic parameters, real conditionals are generally expressed by the gerund suffix *-ja/-v* and conjunction marker *esli*. In contrast, the *esli* form combines with subjunctive marker *vy* in the subordinate clause to create unreal conditionals when the same subjunctive element appears in the main clause⁴⁸, as illustrated in (5-98) and (5-99). Thus, we can confirm that a contrast of switch-reference does not function in Russian conditional elements.

⁴⁸ As discussed in § 5.3, the conditional particle *bimčə(ni)* in Olcha and Nanay is a subjunctive form of copular verb *bi-* ‘be’ in the third person. The co-use of the subjunctive markers, both in the subordinate and in the main clauses, constitutes unreal conditionals whose structure seems similar to that of counterfactual conditionals in Russian.

• **real conditional**

SS

5-96) *zanima-jas'* *aerobikoj*, *ukreplyu* *zdorov'e*.

do-IMPF.GRD aerobics improve.PRS.1SG health

‘If I do aerobics, I shall improve my fitness.’

(Wade 2011 (1992): 391)

5-97) *primeni-v* *novyj metod*, *brilgada* *smozhet* *perevypolnit' normy*.

adopt-PFV.GRD new method team can.PRS.3SG exceed standard

‘If the team adopts the new method, it will exceed the standard.’

(Wade 2011 (1992): 391)

• **unreal conditional**

SS

5-98) *esli by ja znal*, *ja skazal by vam*.

if SUBJ I know.PST I talk.PST SUBJ you.DAT

‘If I knew, I would talk to you.’

(Shirota 2010 (1993): 541)

DS

5-99) *esli vy ne ja, ty pogib by*.

if SUBJ NEG I 2SG.NOM die.PST SUBJ

‘If I had not been there, you would have died.’

(Shirota 2010 (1993): 542)

5.4.4. Mongolic

As shown in Table 5-17, the conditional converbs in *-bAl* - (Buryat), *-(g)AAs-* (Dagur), and *-bAl-* (Khalkha), in the neighboring Mongolic languages, are employed to express conditionals regardless of switch-reference, which corresponds with conditional converbal forms in South Tungusic. As (5-100), (5-101), (5-104), (5-105), (5-108), and (5-109) illustrate, these conditional converbal markers are used to form either SS or DS conditionals. In the case of DS circumstances, these conditional converbal forms can take person endings to denote different subjects in the antecedent and main clauses. Furthermore, the contiguous Mongolic languages commonly possess conditional particles (*haa* < **a-xasa*: be-COND.CVB (Buryat), *aasaa* < **aa-gaas-aa*: be-COND.CVB-REF, *bol* < **bol-bol*: become-COND.CVB (Khalkha)), analyzed as copular

verbs in the conditional converbal forms, which function as VS conditional markers in real or unreal conditional constructions. The examples for unreal conditionals are found in (5-102), (5-103), (5-106), (5-107), (5-110), and (5-111). Moreover, it should be stressed that the imperfective converbal ending **-ju* in the three above-mentioned Mongolic does not serve as a conditional marker. These observations explain that conditional converbal forms in Mongolic are not ruled by switch-reference, as with conditional elements in South Tungusic languages. Additionally, the structure and function of conditional particles in Mongolic also overlap with the above-mentioned functionally corresponding elements in South Tungusic.

Table 5-17. Conditional forms in Mongolic

		real conditional			unreal conditional		
		SS	VS	DS	SS	VS	DS
Buryat	COND.CVB	-bAl-			-bAl-		
	COND.PART	<i>haa, xada</i>			<i>haa, xada</i>		
Dagur	COND.CVB	-(g)AAs-			-(g)AAs-		
	COND.PART	<i>aasaa</i>			<i>aasaa</i>		
Khalkha	COND.CVB	-bAl-			-bAl-		
	COND.PART	<i>bol</i>			<i>bol</i>		

Buryat

• real conditional

SS

- 5-100) *ojir-bol*, *ala-šxa-l* *daa*.
 come-COND.CVB kill-FUT-FOC PART
 ‘If [my husband] comes, he will kills [you].’

(Barannikova et al. 1993: 156)

DS

- 5-101) *xashangxa* *xabar-ai* ***bolo-bol***,
 scanty spring-GEN become-COND.CVB
 buxalshye *übhen* *ünetei* *bolo-dog* *xa*.
 stock hay valuable become-HAB PART
 ‘If a scanty spring comes, even a stock of hay can be valuable.’

(Skribnik 2003: 117)

• **unreal conditional**

SS

- 5-102) *jüüdäləə* **haa**, *xələnguj* *jaxabi-b* *daa*.
dream.PTCP.PST if speak.PTCP.NEG do.what.PST-1SG PART
‘If I had a dream, I would speak [about it].’

(Barannikova et al. 1993: 234)

DS

- 5-103) *xərbəə* *xən* *nəgənəj* *dorjye* *magtaa* **haa**,
if who something Dorz praise.IMPF.PTCP if
əxən’ *ali* *ǰərgə* *omgorxoxob*.
mother.3 to.what.extent child be.proud.of.PST
‘If someone had made a compliment on Dorz, [his] mother would have been proud of her son.’
(Bertagaev and Cydendambaev 1962: 146)

Dagur

• **real conditional**

SS

- 5-104) *sii* *jam-tii* **jaw-aas-e**, *un* *tuur-en-sii* *jəə*.
2SG.NOM he-COM go-COND.CVB-REF NEG get.lost-N.PST-2SG PART
‘If you go with him, you won’t get lost.’

(Sung et al. 2010: 94)

DS

- 5-105) *sii* **iči-waas-sin**, *bi* *basə* *iči-wəj*.
2SG.NOM go-COND.CVB-2SG I also go-N.PST.1SG
‘If you go, I go, too.’

(Sung et al. 2010: 94)

• **unreal conditional**

SS

- 5-106) *ərdkən* *bos-ru-d* **aasaa**,
earlier get.up-IMPF.CVB-DAT if
šii *banʹn-ii* *buda* *idə-ǰ* *ǰabd-ru* *aa-sən-šee*.
2SG.NOM morning-GEN meal eat-IMPF.CVB take-IMPF be-PTCP.PST-2SG
‘If you got up earlier, you would certainly have a chance to have your breakfast.’

(Wu 1994: 29)

DS

- 5-107) *x^war ul war-ru-d-iŋ aasaa, gəuwuləǎǎ-bəi əl-s-aa-sən-mi.*
rain NEG rain-IMPF-DAT-3 if fish-N.PST.1SG say-PTCP.PST-be-PTCP.PST-1SG
'If it did not rain, I would go to fish.'

(Enhebatu et al. 1985: 38-39)

Khalkha

• real conditional

SS

- 5-108) *ene dugujg av-bal, bi avtobus-aar javax-guj.*
this bike.ACC buy-COND.CONV I bus-INS go.PTCP.FUT-NEG
'If I buy this bike, I won't go by bus.'

(Kullman and Tserenpil 1996: 162)

DS

- 5-109) *aavyg buča-ǰ ir-bel, či nadad xeleerej.*
father.ACC return-IMPF.CVB come-COND.CVB 2SG.NOM I.DAT notify.IMP
'If father returns, notify me.'

(Yamakoshi 2012: 142)

• unreal conditional

SS

- 5-110) *ert irsen(sen) bol, bagš-taj uulzax baj-žee.*
early come.PTCP.PST if teacher-COM meet.PTCP.FUT be-PST
'If I had come earlier, I'd have met the teacher.'

(Kullman and Tserenpil 1996: 343)

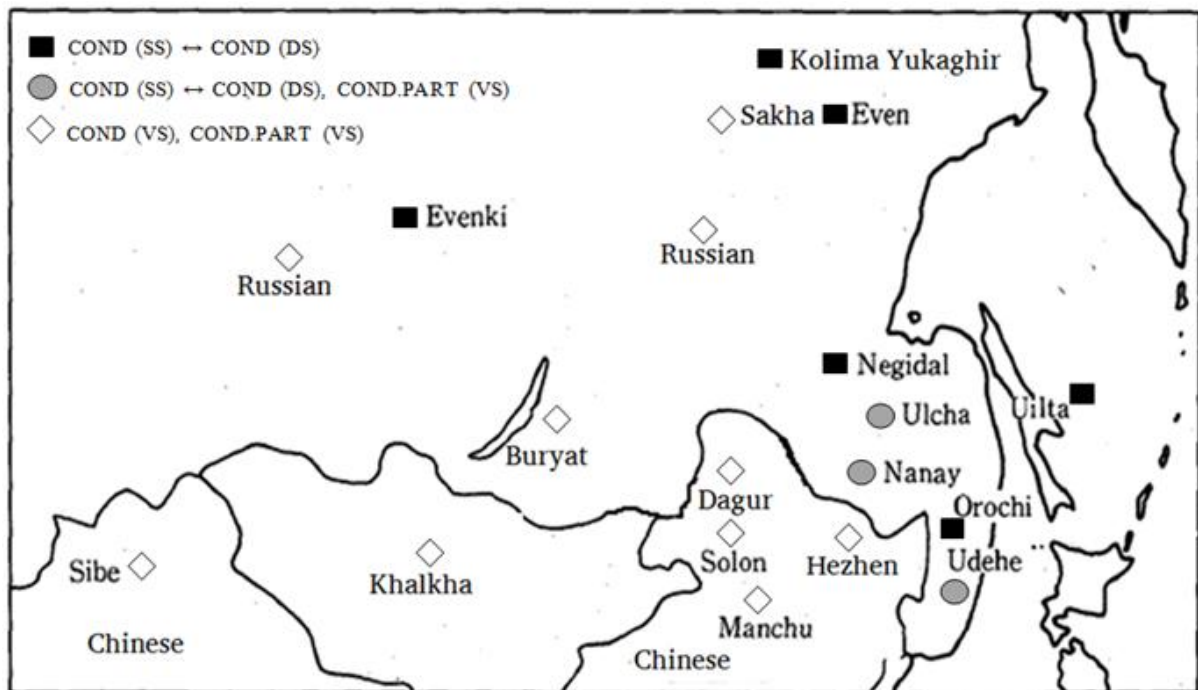
DS

- 5-111) *öčigdör boroo oroo-guj-sen bol,*
yesterday rain fall-NEG-PTCP.PST if
bi xölbömbög toglox ba-jlaa/-san.
I soccer.ACC play.PTCP.FUT be-PST/-PTCP.PST
'If it had not rained yesterday, I would have played soccer.'

(Yamakoshi 2012: 146)

5.5. Conclusion

Map 5-2. Distinctions of conditional forms in Tungusic and neighboring languages from the perspective of switch-reference and conditional types



Taking the two typological parameters of conditionals into consideration, I have examined conditional forms in Tungusic and neighboring languages from the perspective of areal linguistics. As illustrated in Map 5-2, conditional elements in Tungusic display different features according to geographical distribution. Firstly, conditional elements (i.e., SS conditionals: **-mi* ↔ DS conditionals: **-rAk-*) in North Tungusic are strictly distinguished by an opposition of switch-reference, which corresponds to conditional forms in adjacent Kolima Yukaghir⁴⁹. On the contrary, such a switch-reference system does not function as a syntactic device in conditional elements in South Tungusic, either in real or unreal conditionals, although they are corresponded by the DS conditional converbal ending **-rAk-*. In other words, the DS conditional converbal ending **-rAk-* in South Tungusic is employed as a VS conditional marker, whereas the converb in **-mi*

⁴⁹ The strict contrast of switch-reference in conditional forms is considered an innate feature of Proto-Tungusic, rather than contact-based influence from Kolima Yukaghir, because the similar syntactic restriction occurs both in North Tungusic (Evenki, Even, Negidal) and in East Tungusic (Orochi and Uilta).

has lost its function as a conditional element. Note that the imperfective converb ending *-mə* in Sibe, a Tungusic language located in the Xinjiang Uyghur autonomous region, can exceptionally serve as a conditional marker unlike other South Tungusic languages in the Northern Chinese provinces. Furthermore, it is worthy of note that the copula verbs with the conditional converbs in Tungusic from Chinese regions are employed as VS conditional particles as well, either as real or unreal conditionals. The non-switch-reference feature of conditional converbal forms, and the structure and function of copular-related conditional particles in South Tungusic are fully equivalent to conditional elements in Mongolic. Finally, East Tungusic languages employ an extra pair of conditional converbal endings **-pi* (SS) and **-bučA-* (DS) on the basis of switch-reference, generally restricted to real conditionals with the exception of Uilta. Moreover, East Tungusic can be divided into two groups according to the retention of the DS conditional converbal form **-rAk-*. The East Tungusic languages (Nanay, Ulcha, and Udihe), which have lost the DS conditional converbal form **-rAk-*, possess both switch-reference-oriented converbs and non-switch-reference-oriented conditional particles in real conditionals, whereas unreal conditionals are expressed by conditional particles regardless of switch-reference. It is worthy to note that these Tungusic language do not have any corresponding DS conditional form for the converbal suffix **-mi* due to the loss of the DS conditional converbal form **-rAk-*. Instead, these Tungusic languages identically maintain copular-based conditional particles (i.e., *osmɪ*, *bisi*). The conditional conjunction-like elements⁵⁰ of Tungusic are similar to those of Mongolic languages in that they are copular-oriented and function as conditional particles, either real or unreal conditionals, without an inflection of person and number. Kazama (2010a) also raises the possibility that conditional particle *osmɪ* in Nanay may result from indirect influence of Khalkha Mongolian. On the other hand, conditional forms in the remaining East Tungusic languages (Orochi and Uilta), which retain the DS conditional converbal form **-rAk-*, are definitely distinguished by the switch-reference system. In conclusion,

⁵⁰ The VS conditional particles *osmɪ*, *bisi* in Ulcha, Nanay, and Udihe may be related to the DS conditional element **bisiki-* for past conditions in North Tungusic, i.e., *osmɪ* < **osikini* (Ul, Nn), *bisi* < **bisikini* (U). This is because /-k/ between vowels in these Tungusic languages can be deleted from the viewpoint of phonological correspondence. In addition, the *osmɪ*, *bisi*, and **bisiki-* forms appear in similar syntactic environment (e.g., coincidentally used to constitute analytical construction with the preceding participle). However, they do not agree in switch-reference. This possibility also requires further study.

conditional forms in Tungusic, judging from the perspective of switch-reference and conditional types, shows remarkable distinctions on the basis of areal distribution (North and South), and this is speculated to be influenced by the adjacent Mongolic languages. In the case of East Tungusic, the possession of the DS conditional converbal ending **-rAk-* is also considered to be related to differences among conditional forms. Ulcha, Nanay, and Udihe, lacking the **-rAk-*, use the copular-based conditional particles for conditionals, analogous to adjacent Mongolic languages.

Nonetheless, the present chapter does not refer to the origin of a contrast in conditional converbs (i.e., **-pi* (SS) and **-bučA-* (DS)), in terms of switch-reference, observed only in East Tungusic. In addition, the exact semantic differences among conditional forms in the boundary of real conditionals should be specified. Furthermore, this study does not include discussion on the syntactic function as topic or contrastive markers⁵¹, resulting from copular-related conditional elements, from the perspective of information structure. Further studies are required to resolve these issues.

⁵¹ The author has verified a topic and/or contrastive function by the complex of copular verbs and conditional forms in some Tungusic languages, namely *bi-mi* (Ek, E, N, U), *bi-kki* (S), *da-ki-n* (Hz), *o-či* (M), *o-mə* or *o-čə* (Sb) from previous studies (Nedjalkov, I. V. (1997), Malchukov (1995), Gorelova (2006), Nikolaeva and Tolskaya (2001), Kazama (2011b)) or textual materials (Li (2006), Kubo and Kogura (2013)). This phenomenon, mostly concentrating on South Tungusic languages, shows similarity with topic or contrastive markers *haa* (B), *aasaa* (D), and *bol* (K), created by copular verbs with the conditional converbs, in the neighboring Mongolic languages. This might be also resolved from the areal-typological view as well.

Chapter VI Correlatives

Chapter VI

Correlatives⁵²

According to Comrie's (1989 (1981)) cross-linguistic point of view on word order between a relative clause and head noun, relative clauses can be categorized into three types, namely (i) pre-nominal relative, (ii) post-nominal relative, and (iii) internal relative clauses. These are considered "embedded relatives", as the relative clause is a constituent of the main clause. As illustrated in (6-1) and (6-3), Nikolaeva and Tolskaya (2001) show that Udihe retains pre-nominal and internal types of relative clauses in which an interrogative pronoun does not function as a relative marker. In contrast, English is characterized as a post-nominal relative type with a WH element as relative pronoun, as in (6-2).

• *embedded relative*

(i) pre-nominal type (Udihe)

6-1) [əi kusigə-wə min-du sungəla-ə] nii ŋəna-ə-ni.
 this nife-ACC me-DAT give-PTCP.PST person go-PTCP.PST-3SG
 'The man who gave me this knife left.'

(Nikolaeva and Tolskaya 2001: 675)

(ii) post-nominal type (English)

6-2) I do not know the man [who came here yesterday.]

(iii) internal type (Udihe)

6-3) [bi odo-i jugdi-ŋiqa-wa wo-o-ni] uligdiga.
 I grandfather-1SG house-PL-ACC make-PTCP.PST-SG beautiful
 'The houses built by my grandfather are beautiful.'

(Nikolaeva and Tolskaya 2001: 681-2)

⁵² This is a revised and extended English version of Baek (2011, 2012a, and 2012b), parts of which were presented at the 10th Seoul International Altaistic Conference (Suncheon, July 14-17, 2011).

On the other hand, the “adjoined relative clause”, which is not a constituent of the main clause, also occurs in Udihe, as in (6-4). In this relative clause, an interrogative pronoun in the subordinate clause corresponds with a demonstrative pronoun in the main clause in which the WH pronoun appears to serve as a relative marker. This type of relative clause is generally termed “correlative”.

• **adjoined relative**

(iv) correlative type (Udihe)

6-4) **nii** *baa-mi*, **uti** *ətə-i-ni*.
 who find-SIM.CVB that win-PTCP.PRS-3SG
 ‘Whoever finds wins.’

(fielddata)

• **Definition of correlatives**

Traditionally, the term “correlative” refers to the syntactic property whereby a WH-word functioning as a relative marker in the preceding clause admits an anaphoric element in the subsequent clause, as per Trask (1993) below. The example in (6-5) is a correlative in Vietnamese.

A relative clause construction in which the relative clause precedes the main clause and both are overtly marked, the relative clause by a WH-item and the main clause by a demonstrative, the whole thus being characterized by a structure along the lines of ‘which one . . . that one’.

(Trask 1993: 65)

Vietnamese

6-5) **ai** *nâu*, **nây** *ăn*.
 who cook that eat
 ‘Whoever cooks eats.’

(Luo and Crain 2011: 783)

In the present study, constructions such as that in (6-6), which contain a repetition of the WH-word in both clauses, are included within the notion of “correlative” due to their similar semantic function.

Chinese

6-6) *shuí* *zuò* *cài*, *shuí* (*jiù*) *chī*.
who cook food who then eat
‘Whoever cooks eats.’

Thus, the two types of correlative construction can be defined as represented in Figure 6-1 below.

Figure 6-1. Definition of correlative (Dikken (2005: 499) with a minor change)

[REL CL / WH pronoun . . .], [MAIN CL / WH or DEM pronoun . . .]

The goal of Chapter VI is to examine the possible influence of major neighboring languages (Russian and Chinese) on Tungusic correlatives from the perspective of areal linguistics. This chapter is structured as follows: § 6.1 introduces previous works on correlatives in Udihe, Russian, and Chinese and the relationship between correlatives in Tungusic and in Russian and Chinese. In § 6.2, I present an outline of the typological parameters for correlatives in this study. § 6.3 compares the syntax of correlatives in the three languages, with a focus on correlative type (WH-WH or WH-DEM) and verb form (non-final or final) in the relative clause. In § 6.4, the syntax of correlatives in all Tungusic languages is surveyed further. Following this, § 6.5 focuses on correlatives in other neighboring languages (Kolima Yukaghir, Turkic (Sakha, Uyghur, and Kazakh) and Mongolic (Buryat, Khalkha, Dagur, and Chahar Mongolian)). Finally, § 6.6 concludes the chapter with a summary of the main points.

6.1. Previous studies

In § 6.1, I review previous literature on correlatives in Udihe, Russian, and Chinese and on the relationship between correlatives in the Tungusic languages and these two major neighboring languages.

6.1.1. Correlatives in Udihe, Russian, and Chinese

6.1.1.1. Udihe correlatives

Few studies have been conducted on Udihe correlatives. Nikolaeva and Tolskaya (2001) briefly mention that Udihe has two types of correlatives depending on the correlating elements used in the subordinate and main clauses. They explain as follows:

Either the same interrogative pronoun is used both in the subordinate and superordinate clause, or the interrogative pronoun of the dependent clause corresponds to the same morphological form of the anaphoric pronoun (u)ti within the main clause.

(Nikolaeva and Tolskaya 2001: 763)

An example of each type is given in (6-7) and (6-8), respectively.

Udihe

6-7) **ni** *galakta-mi*, **ni** *b'a*.
who seek-SIM.CVB who find
'Whoever seeks finds⁵³.'

(Nikolaeva and Tolskaya 2001: 763)

6-8) **nii** *čaai-la* *xətigəna-mi*, **uti** *ətə-i-ni*.
who far-LOC jump-SIM.CVB that win-PRS.PTCP-3SG
'Whoever jumps further wins.'

(Nikolaeva and Tolskaya 2001: 763)

6.1.1.2. Russian correlative

Russian, which has been a dominant language in the Udihe-speaking region since the 19th century, has a correlative construction in which the interrogative pronoun in the relative clause correlates with the demonstrative pronoun in the main clause, as described by Leckey (1992):

⁵³ Concerning the translation for each example, supposing that correlatives in this study are generally close to the universal meaning, I translate them similarly to the so-called “free relative” of English. Nevertheless, this does not imply that the generalized meaning is the only possible interpretation. In view of the semantic functions of correlatives from a cross-linguistic perspective, there is the possibility of correlatives with a definite meaning in Altaic type languages as well.

The preposed relative clause contains either a pronominal or adjectival relative word in initial position. Either type of relative word may relativize a noun that is overtly expressed in that clause or may appear alone. The clause with the relative word precedes a second clause containing a coreferential demonstrative pronoun or a noun.

(Leckey 1992: 13)

Example (6-9) illustrates the Russian correlative construction:

6-9) **Kto** *odoleet*, **tot** *i* *prav*.
 who.NOM win.PRS.3SG that.NOM EMPH right
 ‘Whoever wins is right.’

(Leckey 1992: 13)

6.1.1.3. Chinese correlative

Chinese, which is believed to have had a substantial influence on Udihe, has a syntactic construction that contains repetition of the interrogative pronoun. In traditional Chinese grammar, this construction is referred to by a number of different terms (e.g., bare conditional (Cheng and Huang 1996), chain construction (Lu 2002), and WH-conditional (Luo and Crain 2011)). In the present study, however, the construction is henceforth unified under the term “correlative,” following Luo and Crain (2011: 782-792), who discuss similarities between Chinese WH-conditionals and correlatives.

Referring to previous studies (Cheng and Huang 1996, Luo and Crain 2011) on the Chinese correlative, it can be assumed that it forms a conditional-like structure by repeating the same interrogative pronoun, both in the antecedent and subsequent clauses, without any use of a conditional conjunction (like *if* in English). The conditional effect of the correlative is consistent with that of Russian, as demonstrated in (6-10).

6-10) **shuí** *xiān* *lái*, **shuí** *xiān* *chī*.
 who first come who first eat
 ‘Whoever first comes first eats.’

(Luo and Crain 2011: 756)

6.1.2. Relationships between Tungusic correlatives and Russian and Chinese correlatives

As described above, there are syntactic similarities between the correlatives of Udihe and those of Russian and Chinese. These kinds of correlatives are widely identified in all Tungusic languages. Thus, previous studies have pointed out that Russian and Chinese may have influenced Tungusic correlatives, but comments on the matter are brief and detailed discussion is lacking. A brief review of work on the relationship of WH correlatives in Tungusic to those in the major neighboring languages (Russian and Chinese) is given below.

6.1.2.1. Avrorin (1961)

i) Russian influence (WH-DEM correlative)

Avrorin (1961: 256) suggests that there are two types of correlatives (i.e., WH-WH and WH-DEM) in Nanay, and that the latter is influenced by Russian. An example of the WH-DEM correlative in Nanay is given in (6-11).

6-11) *ui* *jobo-asi*, *tai* *nai* *ǰap-təsi*.
who work-PTCP.PRS.NEG that person eat-PTCP.PRS.NEG
'Whoever does not work does not eat.'

(Avrorin 1961: 256)

6.1.2.2. Tsumagari (1996, 1997a)

i) Chinese influence (WH-WH correlative)

Tsumagari (1997a: 182) comments that the Tungusic repetition of the interrogative pronoun, which has a function close to that of a relative clause, may be influenced by Chinese, judging from syntactic similarities. He also mentions that this construction is confirmed in Sibe, Solon, Nanay, Bikin-Nanay and Ulcha.

ii) Russian influence (WH-DEM correlative)

Tsumagari (1996: 184) implies that the WH-DEM correlative construction in the Tungusic languages is due to influence from Russian.

6.1.2.3. Kazama (2003a)

In contrast, Kazama (2003a: 292) expresses doubt as to whether every correlative construction in the Altaic languages has resulted from the influence of Russian and Chinese, given that analogous constructions occur in most Altaic languages.

6.1.2.4. Gap in the previous research

Thus, certain previous studies have suggested on the basis of syntactic similarities that WH correlatives in Tungusic may have resulted from the influence of Russian and Chinese. However, this conclusion is not straightforward, as the study of Tungusic correlatives remains in its early stages.

6.2. Typological parameters of WH correlatives

In order to elaborate from the viewpoint of areal linguistics on the possibility of language contact with Russian or Chinese having influenced correlatives in Tungusic, this study assumes the two syntactic parameters of correlative constructions given in Figure 6-2 below. First, depending on the combination of correlative words in both clauses, I classify the WH correlatives of each language into two types (i.e., WH-WH and WH-DEM) and compare them. Second, I focus on verb form in the relative clause, which determines whether or not it can stand alone as a sentence.

Figure 6-2. Typological parameters of the correlative construction⁵⁴

i) correlative type	
• WH-WH correlative	• WH-DEM correlative
ii) verb form in the relative clause	
• non-final form	• final form

⁵⁴ Note that the ‘WH pronoun’ in this study, a constituent in correlative constructions, will be restricted to the following six interrogative pronouns (*who*, *what*, *when*, *where*, *how*, and *how many or much*).

6.3. Syntactic comparison of WH correlatives in Udihe, Russian, and Chinese

In § 6.3, I compare correlatives in Udihe with those of Russian and Chinese at the syntactic level, focusing specifically on two syntactic parameters, namely correlative type and verb form in the relative clause.

6.3.1 The first parameter: correlative type

The focus here is on the correlated elements, typologically organized into two patterns, namely WH-WH and WH-DEM, between subordinate and main clauses in Udihe, Russian, and Chinese correlatives.

6.3.1.1 Udihe

i) WH-WH

Based on fieldwork conducted in 2009 to 2011 in the village Krasny-Yar, where the Bikin dialect of Udihe is spoken, and on textual material, it is confirmed that all six interrogative pronouns (*nii-nii* ‘who-who,’ *jəu-jəu* ‘what-what,’ *aali-aali* ‘when-when,’ *ilə-ilə* ‘where-where,’ *ono-ono* ‘how-how,’ and *adi-adi* ‘how many-how many’) can form correlative constructions with repetition of the WH pronoun, as illustrated in examples (6-12) to (6-17).

a. *nii* ‘who’ — *nii* ‘who’

6-12) *nii tatusi-mi, nii kəsi-jǐ bagdi-i-ni.*
who study-SIM.CVB who happy-INS live-PTCP.PRS-3SG
‘Whoever studies lives happily.’

(fielddata)

b. *jəu* ‘what’ — *jəu* ‘what’

6-13) *jəu-wə isə-mi, jəu-wə waa-ø-mi.*
what-ACC see-SIM.CVB what-ACC kill-PRS-1SG
‘I hunt whatever I see.’

(fielddata)

c. *aali* ‘when’ — *aali* ‘when’

6-14) *aali ɣənə-mi, aali utə gələ-i.*
when go-SIM.CVB when so seek-PTCP.PRS
‘Whenever I go, I ask (for it) that way.’

(Kazama 2009a: 90)

d. *ilə* ‘where’ — *ilə* ‘where’

- 6-15) *ilə jatasi-li-mi, ilə jatasi-i.*
where give.birth.to-INC-SIM.CVB where give.birth.to-PTCP.PRS
‘Wherever I start to give birth to (a baby), I give birth to a baby.’

(Kazama 2007a: 186)

e. *ono* ‘how’ — *ono* ‘how’

- 6-16) *sii ono diana-isi-i, bii ono nixə-i-mi.*
2SG.NOM how say-COND.CVB-2SG I how do-PTCP.PRS-1SG
‘I do the way you say.’

(fielddata)

f. *adi* ‘how many or much’ — *adi* ‘how many or much’

- 6-17) *adi ijə waa-mi, adi tikpənə-i.*
how.many horn kill-SIM.CVB how.many pack-PTCP.PRS.
‘I pack as many horns as I hunt.’

(Kazama 2004: 464)

ii) WH-DEM

Furthermore, WH-DEM correlative constructions are also attested in Udihe as follows: *nii-uti* ‘who-that,’ *jəu-uta* ‘what-that,’ *aali-utəliə* ‘when-then,’ *ilə-utala* ‘where-there,’ and *ono-utə=bədə* ‘how-that way.’ However, the interrogative pronoun *adi* ‘how many or much’ cannot be used as a constituent in WH-DEM correlative constructions. Regarding the properties of anaphoric pronouns, the demonstrative pronoun *uti* ‘that’ varies according to its syntactic function in the WH-DEM correlative. Examples are given in (6-18) to (6-22) below.

a. *nii* ‘who’ — *uti* (that.NOM)

- 6-18) *nii caala-mi, uti baa-ŋaŋa-ni.*
who want-SIM.CVB that get-FUT.PTCP-3SG
‘Whoever wants obtains.’

(fielddata)

b. *jəu* ‘what’ — *uta* (that.OBL)

- 6-19) *jəu-wə isə-mi, uta-wa waa-ø-mi.*
what-ACC see-SIM.CVB that-ACC hunt-PRS-1SG
‘I hunt whatever I see.’

(fielddata)

c. *aali* ‘when’ — *utəliə* (then)

6-20) *aali nuani əmə-isi-ni, utəliə bii kəsi ədə-i-mi.*
 when (s)he come-COND.CVB-3SG then I happy become-PTCP.PRS-1SG
 ‘I become happy whenever (s)he comes.’

(fielddata)

d. *ilə* ‘where’ — *utala* (that.OBL)

6-21) *ilə olokto-mi, uta-la diga-i.*
 where cook-SIM.CVB that-LOC eat-PTCP.PRS
 ‘(S)he eats wherever (s)he cooks.’

(fielddata)

e. *ono* ‘how’ — *ute=bədə* (that way)

6-22) *sii ono diana-isi-i, bii utə=bədə nixə-i-mi.*
 2SG.NOM how say-COND.CVB-2SG I that=CLT do-PTCP.PRS-1SG
 ‘I do the way you say.’

(fielddata)

6.3.1.2. Russian

i) WH-WH

This construction is not attested in the present study.

ii) WH-DEM

Every WH-DEM pronoun pair (e.g., *kto-tot* ‘who-that,’ *čto-to* ‘what-that,’ *kogda-togda* ‘when-then,’ *gde-tam* ‘where-there,’ *kak-tak* ‘how-that way,’ *skol’ko-stol’ko* ‘how many-that many’) creates a correlative construction in Russian. Regarding the property of an overt pronoun in the main clause, only the demonstrative pronoun is used to compose correlatives in Russian. Examples of WH-DEM Russian correlatives are given in (6-23) to (6-28).

a. *kto* (who.NOM) — *tot* (that.NOM)

6-23) *kto platit, tot jakazevaet muŭyku.*
 who.NOM pay.PRS.3SG that.NOM order.PRS.3SG music.ACC
 ‘Whoever pays orders music.’

(Mitrenina 2010: 137)

b. *čto* (what.ACC) — *to* (that.OBL)

- 6-24) **čto** *poseesh'*, **to** *i* *pozhnesh'*.
what.ACC sow.PRS.2SG that.ACC EMPH reap.PRS.2SG
'You reap whatever you sow.'

(Leckey 1992: 43)

c. *kogda* (what.ACC) — *tagdao* (that.OBL)

- 6-25) **kogda** *on* *vernetsja*, **togda** *i* *rasskaŋet*.
when he return.PRS.3SG then EMPH tell.PRS.3SG
'He will talk about it whenever he gets back.'

(Mitrenina 2010: 138)

d. *gde* (where) — *tam* (there)

- 6-26) **gde** *son* *zastanet*, **tam** *on* *i* *spit*.
where sleep.NOM overtake.PRS.3SG there he EMPH sleep.PRS.3SG
'He sleeps wherever sleep overtakes him.'

(Mitrenina 2010: 137)

f. *kak* (how) — *tak* (that way)

- 6-27) **kak** *slomal*, **tak** *i* *čini*.
how break.PST so EMPH repair.IMP
'Repair it the way you broke it.'

(Mitrenina 2010: 138)

g. *skol'ko* (how many or much) — *stol'ko* (that much)

- 6-28) **skol'ko** *deneg* *on* *poprosil*, **stol'ko** *roditeli* *emu* *i* *dali*.
how.much money he ask.PST that.much parents him EMPH give.PST
'His parents gave him as much money as he asked.'

(Mitrenina 2010: 138)

6.3.1.3. Chinese

i) WH-WH

Chinese literature on the WH correlative construction reveals that all interrogative pronouns (*shuí-shuí* 'who-who,' *shénme-shénme* 'what-what,' *shénmeshíhòu-shénmeshíhòu* 'when-when,' *nǎli-nǎli* 'where-where,' *zěnmeshénme* 'how-how,' and *duōshǎo-duōshǎo* 'how many-how many') can form WH-WH correlative constructions. Examples are shown in (6-29) to (6-34). In this case, the adverbial element *jiù* 'then' is optional, as mentioned by Cheng and Huang (1996).

a. *shuí* (who) — *shuí*

6-29) ***shuí xiān lái, shuí xiān chī.***

who first come who first eat

‘Whoever first comes first eats.’

(Luo and Crain 2011: 756)

b. *shénme* (what) — *shénme*

6-30) ***ài shénme, liúxià shénme.***

love what leave what

‘Leave whatever you love.’

(Lu 2002: 145)

c. *shénmeshíhou* (when) — *shénmeshíhou*

6-31) ***shénmeshíhou cún gòu le, shénmeshíhou mǎi mótuōchē.***

when save enough PFV when buy motorcycle

‘I will buy a motorcycle whenever I save enough money.’

(Aihara et al. 1996: 337)

d. *nǎli* (where) — *nǎli*

6-32) ***nǎli xūyào, jiù dào nǎli qù.***

where need, then arrive where go

‘Wherever there is a need, I will go there.’

(Aihara et al. 1996: 337)

e. *zěnmē* (how) — *zěnmē*

6-33) ***nǐ zěnmē shuō, wǒ jiù zěnmē bàn.***

you how say I then how do

‘I do the way you say.’

(Ogawa 2006:206)

f. *duōshao* (how many or much) — *duōshao*

6-34) ***háizi yào duōshao qián, tā jiù gěi duōshao qián.***

child want how.much money he then give how.much money

‘He gives as much money as his child wants.’

(Ogawa 2006:206)

ii) WH-DEM

According to Cheng and Huang (1996: 127-130), the WH pronoun in the subsequent clause cannot generally be replaced by an overt pronoun, as demonstrated by (6-35b) and (6-36b) below.

WH-WH

6-35a) *shuí xiān lái, shuí xiān chī.*

who first come who first eat

‘Whoever first comes first eats.’

(Cheng and Huang 1996: 127)

*WH-DEM

6-35b) *shuí xiān lái, *tā xiān chī.*

who first come that first eat

(Cheng and Huang 1996: 127)

WH-WH

6-36a) *nǐ xǐhuan shuí, wǒ jiù pīpíng shuí.*

you like who I then criticize who

‘I criticize whomever you like.’

(Cheng and Huang 1996: 127)

*WH-DEM

6-36b) *nǐ xǐhuan shuí, wǒ jiù pīpíng *tā.*

you like who I then criticize that

(Cheng and Huang 1996: 127)

However, in certain circumstances, the interrogative pronoun in the main clause can be substituted by a demonstrative pronoun in Chinese. In this type of correlative, Cheng and Huang (1996: 130) report that “we observe that in those sentences in which a pronoun/wh-word alternation is possible, the consequent clause must contain the adverbial element *jiù* ‘then’,” unlike the WH-WH correlative (see (6-37) and (6-38)).

a. *shuí* (who) — *tā* (he or she)

6-37) *kàn shuí kěwù, jiù duǒkāi tā.*

see who hateful then avoid him

‘I avoid whomever is hateful.’

(Lu 2002: 94)

b. *nǎ* (where) — *nà* (there)

6-38) *nǎr de kùnnan zuì duō, wǒmen jiù yīnggāi dào nàr qù.*
 where of difficulty most a lot we then should arrive there go
 ‘We should arrive wherever there are difficulties.’

(Takahashi 2006: 167)

Based on observation of Chinese WH-DEM correlatives, I speculate that usage as a WH-DEM correlative is restricted to some combination of interrogative and demonstrative with an adverbial element (person: *shu í-tā* ‘who-that,’ place: *nǎ(li)-nà(li)* ‘where-there’), which demonstrates that the WH-DEM correlative in Chinese is not as productive as that in Udihe.

6.3.1.4. Correlative types in Udihe, Russian, and Chinese

Table 6-1. WH-WH correlatives in Udihe, Russian, and Chinese

	U	R	C
who-who	+	-	+
what-what	+	-	+
when-when	+	-	+
where-where	+	-	+
how-how	+	-	+
how many-how many	+	-	+

Table 6-2. WH-DEM correlatives in Udihe, Russian, and Chinese

	U	R	C
who-that	+	+	?
what-that	+	+	-
when-then	+	+	-
where-there	+	+	?
how-that way	+	+	-
how many-that many	-	+	-

As presented in Tables 6-1 and 6-2 below, Udihe is shown to have a mixture of WH-WH and WH-DEM correlatives. Thus, Udihe WH-WH correlatives are identical to those of Chinese, whereas Udihe WH-DEM correlatives are closer to those of Russian.

6.3.2. The second parameter: verb form in the relative clause

In addition to investigating the types of correlatives found in each of the three languages, let us also examine the verb form in the subordinate clause, focusing on its syntactic function. Specifically, consider whether it can be used as a predicate.

6.3.2.1. Udihe

Both verb forms (i.e., non-final and final) appear in Udihe correlatives, as described below.

i) Non-final form

Two converbal forms, the simultaneous converb in *-mi* and the conditional converb in *-(l)isi-*, are attested in the relative clause. Notice that these converbal elements have in common that they contain conditional functions. The difference between the simultaneous and the conditional converb depends on the consistency of the subject in the antecedent and subsequent clause⁵⁵. Examples with each converb are given in (6-39) to (6-40) and (6-41) to (6-42), respectively.

• simultaneous converb: *V-mi*

WH-WH correlative

- 6-39) *nakta-wa* *kiaŋa-wa*, *jəu* *isə-mi*, *jəu* *waa-i*.
 boar-ACC deer-ACC what see-SIM.CVB what hunt-PTCP.PRS
 ‘Boars, deer, [he] hunts whatever [he] sees.’

(Kazama 2007a: 219)

⁵⁵ As discussed in Chapter V, the converb in *-lisi-* corresponds with the converb in *-li* in terms of switch-reference in conditional constructions. However, the correlative, connected by the SS converbal ending *-li*, is not attested in my observations. Nevertheless, the possibility of a correlative with an SS converb in *-li* remains, given that its counterpart *-lisi-* can form a WH-WH or a WH-DEM correlative.

WH-DEM correlative

- 6-40) *ilə* *olokto-mi*, *uta-la* *diga-i*.
where cook-SIM.CVB that-LOC eat-PTCP.PRS
‘He eats wherever he cooks.’

(fielddata)

• **conditional converb: V-(/l)isi-personal suffix**

WH-WH correlative

- 6-41) *ilə* *ɣənə-isi-ni*, *ilə* *buji-wə* *waa-mi*,
where go-COND.CVB-3SG where game-ACC kill-SIM.CVB
ʃuliə-lə-ni *nədə-i-ni*.
front-LOC-3SG put-PTCP.PRS-3SG
‘The tiger kills game and puts them in front of him wherever he goes.’

(Kazama 2004: 512)

WH-DEM correlative

- 6-42) *sii* *ono* *diana-isi-i*, *bii* *utə=bədə* *nixə-i-mi*.
2SG.NOM how say-COND.CVB-2SG I that=CLT do-PTCP.PRS-1SG
‘I do the way you say.’

(fielddata)

ii) Final form

The Udihe correlative also has the final form in the left-adjoined clause (see (6-43) to (6-44)), which ends with the participle verb form. This is uncommon in Altaic languages, which generally use non-final forms (mainly converbs) in the subordinate clause.

• **Participle verb**

WH-WH correlative

- 6-43) *ilə* *kanjoo-la-i*, *ilə=dəm* *təu* *biə*.
where ginseng.searching-VBLZ-PTCP.PRS where=CLT all be
‘There are all of them wherever I do ginseng-searching.’

(Kazama 2007a: 226)

WH-DEM correlative

6-44) *jəu ə-si-mi oŋmo, uta-wa təu təluŋu-ø-mi.*
 what NEG-PTCP.PST-1SG forget that-ACC all nattate-PRS-1SG
 ‘I tell whatever I did not forget.’

(Kazama 2007a: 234)

6.3.2.2. Russian

Given that the relative clause in most Indo-European languages has the final form only, which can stand independently as a sentence, it is appropriate to suggest that the Russian correlative has the final form as well.

6.3.2.3. Chinese

Chinese, an isolating language that indicates grammatical relations through word order, does not maintain the distinction between non-final and final verb forms. Thus, it cannot be concluded from the verb form in the subordinate clause whether the Chinese correlative clause has a non-final or final form. I leave this question open in this study.

6.3.2.4. Verb form of correlatives in Udihe, Russian, and Chinese

Table 6-3. Verb form in relative clauses in Udihe, Russian, and Chinese

	non-final	final
U	+ (SIM or COND converb)	+ (participle)
R	-	+
C	?	?

As for the verb form in the relative clause, the data in Table 6-3 illustrate that either non-final or final forms can be used in Udihe correlatives, whereas Russian allows only final verb forms in the subordinate clause. Thus, as far as verbal type in correlative constructions is concerned, it is at present difficult to establish any relation between Udihe and either Russian or Chinese.

6.3.3. Summary

Table 6-4 summarizes the patterns in the syntactic features of correlatives in the three languages discussed above. The syntactic construction of the Udihe correlative, with repetition of the interrogative, is similar to the Chinese correlative, whereas the syntax of the Udihe WH-DEM correlative is closer to the pre-posed relative clause in Russian. Concerning verb form in the correlative clause, there is no remarkable similarity among the three languages at this stage. Thus, it remains premature to determine whether or not the Udihe correlative may have resulted from Russian and/or Chinese on the basis of the similarity in correlative type. Given that Udihe has characteristics of both Chinese and Russian correlatives, however, the possibility exists that language contact with major languages neighboring Udihe has affected its correlatives.

Table 6-4. Syntactic comparison of correlatives in Udihe , Russian, and Chinese

	correlative type		verb form	
	WH-WH	WH-DEM	non-final	final
U	+	+	+	+
R	-	+	-	+
C	+	-	?	?

6.4. Correlatives in Tungusic

In § 6.4, extending the range of study to all Tungusic languages, I further examine linguistic influence on correlatives from an areal typological view. Referring to grammatical and textual materials on Tungusic languages, I attempt to classify the WH correlatives of Tungusic into two types: WH-WH and WH-DEM. In addition, a secondary focus is on the verb form in the first correlative clause to determine whether or not it can stand as an independent sentence. With reference to the Tungusic classification of Ikegami (1974), the two typological standards are applied to Tungusic correlatives.

6.4.1. First group

6.4.1.1. Evenki

Ikegami (2004: 120) points out that the WH pronoun in the northern dialect of Evenki functions as a relative marker. In addition, Ikegami (2002a), in his Evenki text, presents examples of the WH-DEM correlative with the final form in the subordinate clause. These examples are reproduced as (6-45) and (6-46) below. Moreover, Brodskaja (1988: 84), who covers the syntax of Evenki complex sentences, also reports that an interrogative pronoun working as a relative pronoun in the left clause correlates with a demonstrative pronoun in the main clause. She refers to the verb form of the correlative clause as the final form.

a. WH-WH

This construction is not attested in the present study.

b. WH-DEM (final form only)

6-45) *ŋi tumi-ǰɛ-n mawut-u-t mo-wa, tar dawdu-wki.*
 who hit-IMPF-PRS.3SG lasso-E-INS tree-ACC that win-PTCP.HAB
 ‘Whoever hits a tree with a lasso wins.’

(Ikegami 2002a: 352)

6-46) *ŋi alba-wki tumi-ǰɛ-mi tuǰəwun-mə,*
 who be.unable-PTCP.HAB hit-IMPF-COND.CVB pole-ACC
tara xalǰa-wkan-i-wki-l.
 that.ACC embarrass-CAUS-E-PTCP.HAB-PL
 ‘They embarrass whomever cannot hit a pole.’

(Ikegami 2002a: 352)

Figure 6-3. WH-DEM correlative in Amur Evenki (Bulatova 1987: 70)

[*īdū-tadū* ‘where-there,’ *īdūk-taduk* ‘from where-from there,’ *īlē-talā* ‘where-there,’
īlī-talī ‘toward where-toward there,’ *ōn-targacin* ‘which-that,’ *ōkin-tēli* ‘when-then’]

According to Bulatova (1987: 70), the Amur dialect of Evenki also has correlative constructions with WH-DEM pronouns. The Amur Evenki correlative takes sentence-

final form, and functions as a predicate. Figure 6-3 lists the WH-DEM correlatives in Evenki, and examples are given in (6-47) and (6-48).

Evenki (Eastern dialect)

a. WH-WH

This construction is not attested in the present study.

b. WH-DEM (final form only)

- 6-47) *īdū* *bū* *anɣat-cā-bun,* *tadū* *aɟa ʃukcā.*
 where 1PL.EXC.NOM stay-PTCP.PST-1PL.EXC there good accommodation
 ‘There was a good accommodation wherever we stayed.’

(Bulatova 1987: 70)

- 6-48) *okin* *sī* *ororbo baka-ʃiŋā-s,* *təli* *nulgi-ʃiŋəə-t.*
 when 2SG.NOM deer find-PTCP.FUT-2SG then stay-PTCP.FUT-1PL.INCL.
 ‘We will stay whenever you find a deer.’

(Bulatova 1987: 70)

6.4.1.2. Even

Little research has been conducted on Even correlatives. Malchukov (2008: 238) presents the correlative expression in (6-49) with a final form in the subordinate clause. Malchukov (2008) explains that the mismatch of the syntactic role of the relativized element between the antecedent and subsequent clauses can be avoided by the finite poly-predicate structure with the use of a relative pronoun in the subordinate clause and corresponding word in the main clause, namely a correlative construction. In addition, the WH-DEM correlative, connected by a sentence-final verb form, is also verified in the Eastern dialect of Even, as illustrated in (6-50).

a. WH-WH: not found

This construction is not attested in the present study.

b. WH-DEM (final form only)

Western Even

6-49) *xi* *ŋi-du* *dabdu-ča-s*, *ta-la* *xör-ji-m*.
2SG.NOM who-DAT lose-PTCP.PST-2SG that-LOC go-FUT-1SG

‘I will go to whomever you lost.’

(Malchukov 2008: 238)

Eastern Even

6-50) *ŋii* *ə-č* *gurgawči-r*, *tarak* *ətəən* *ǰəptu*.
who NEG-PTCP.PST work-PTCP that NEG.PRS.3PL eat

‘Whoever did not work does not eat.’

(Kazama 2009b: 392)

6.4.1.3. Negidal

Cincius (1982) and Pevnov and Khasanova (2003), writing about Negidal, make no reference to the correlative construction. Nonetheless, an example of the WH-WH correlative does occur in the latter text, given in (6-51), which ends with a non-finite verb form (i.e., the conditional converbal ending *-mi*). Kazama’s (2002) grammatical description, on the other hand, mentions that Negidal has correlatives and offers the example shown in (6-52). This construction allows the final form in the antecedent clause, as do Evenki and Even.

a. WH-WH (non-final)

6-51) *on* *bi-mi*, *ōn=da* *bi-xel*.
how be-COND.CVB how=CLT be-IMP.2SG

‘Live the way you live.’

(Pevnov and Khasanova 2003: 148)

b. WH-DEM (final form)

6-52) *nii* *ə-tə-ji* *dəŋsi* *bəjə*, *taj* *a-ta-n* *ǰəp-pə*⁵⁶.
who NEG-FUT-REF work person that NEG-FUT-3S eat-PTCP

‘Whoever does not work will not eat.’

(Kazama 2002: 111)

⁵⁶ Note that the Negidal and Uilta correlative constructions in this chapter could be literal translations of original Russian sentences used during sentence elicitation. Therefore, judgment as to whether or not these should be regarded as correlatives might be controversial; nonetheless, I regard these as correlatives, assuming this to be a true aspect of each language that reflects influence from major languages in recent times.

6.4.1.4. Solon

Referring to the textual materials adopted in this study, only the WH-WH correlative constructions, not the WH-DEM type, are manifested. Solon verbs take the non-final form (i.e., the conditional converb in *-kki-*) in correlative clauses, meaning that they cannot stand independently as sentences. Examples are shown in (6-53) and (6-54).

a. WH-WH (non-final form only)

- 6-53) *iləə bi-kki, iləə latta-ra-n.*
where be-COND.CVB where stick-IMPF-3SG
'Wherever it is, there it sticks (to something).'

(Kazama 2007d: 44)

- 6-54) *ooxi xindakkoŋ bi-kki-wi, ooxi aja.*
how.much cheap be-COND.CVB-REF how.much good
'The cheaper it is, the better it is.'

(Chaoke et al.1991: 38)

b. WH-DEM

This construction is not attested in the present study.

6.4.2. Second group

6.4.2.1. Udihe

As discussed in § 6.3, Udihe has both WH-WH and WH-DEM correlatives with non-final or final verb forms in the antecedent clause.

6.4.2.2. Orochi

Avrorin and Boldyrev (2001: 197) report that the interrogative pronoun in Orochi has a relative meaning, introducing instances of WH-WH and WH-DEM correlatives (see (6-55) and (6-56)). Either non-final or final verb forms (the simultaneous converbal form *-mi* or the participle verb, respectively) can be used in the correlative clause.

a. WH-WH (non final form)

- 6-55) *ñĩ küppi-mi, ñĩ söntüla-xa-ñi.*
who be.in.time-SIM.CVB who hit with a fist-PTCP.PST-3SG
'Whoever is in time hits with a fist.'

(Avrorin and Boldyrev 2001: 197)

b. WH-DEM (final form)

- 6-56) *təi jolo-wo ŋt̪ čũ ui-lə uʃi-i,*
that stone-ACC who most upper-LOC lift-PTCP.PRS
təi ŋö manga mæggə.
that person strong hero
‘Whoever lifts up that stone most high is a strong hero.’

(Avrorin and Boldyrev 2001: 197)

6.4.2.3. Hezhen

Hezhen, regarded as one of the Nanay dialects in certain previous studies, has WH-WH correlatives with the conditional converb in *-ki-*, which cannot serve as a sentence-final verb predicate. Further correlative examples appear in Hezhen text (Li 2011: 214-215). See (6-57) and (6-58) for examples of WH-WH correlatives in Hezhen.

a. WH-WH (non-final form only)

- 6-57) *ni əi ilan ʃakə-wə gaʃi-ki-ni,*
who this three thing-ACC bring-COND.CVB-3SG
bi asən xitə-i ni-du bu-i.
I woman child-GEN who-DAT give-1SG
‘I will give my daughter to whomever brings these three things.’

(Tamura 2008: 49)

- 6-58) *ətiki ni tiaxələ-ki, ni ənə-m-ičə-busu.*
from.now who want-COND.CVB who go-IMP.CVB-see-IMP.2PL
‘From now whoever wants should try to go.’

(Tamura 2008: 50)

b. WH-DEM

This construction is not attested in the present study.

6.4.3. Third group

6.4.3.1. Nanay

Avrorin (1961: 256) observes that Nanay forms correlatives, as illustrated in (6-59) and (6-60), by repeating the same WH marker in both the antecedent and subsequent clauses. He also mentions WH-DEM correlatives in which the WH pronoun correlates

with the demonstrative pronoun, as in (6-61). Concerning verb forms, either non-final or final forms can be used in the relative clause.

a. WH-WH (non-final/final form)

- 6-59) **ui** *gələktə-i-ni*, **ui** *nə* *ba-ri-ni*.
 who seek-PTCP.PRS-3SG who surely find-PTCP.PRS-3SG
 ‘Whoever seeks surely finds.’

(Avrorin 1961: 256)

- 6-60) **xali** *cixala-mi*, **xali** *ənə-m-bi*.
 when want-SIM.CVB when go-PRS-1SG
 ‘I go whenever I want.’

(Avrorin 1961: 256)

a. WH-DEM (final form)

- 6-61) **ui** *ǰobo-asi*, **təi** *nai* *ǰəp-təsi*.
 who work-PTCP.PRS.NEG that peron eat-PTCP.PRS.NEG
 ‘Whoever does not work does not eat.’

(Avrorin 1961: 256)

6.4.3.2. Ulcha

Both types of correlatives (i.e., WH-WH and WH-DEM) are confirmed in Ulcha, and may take either the non-final form (the conditional converb in *-pi*) or the final form (the participle) in the subordinate clause. Examples appear in (6-62) to (6-65).

a. WH-WH (non-final/final form)

- 6-62) **xawasɪ** *očv-pɪ*, **xawasɪ=daa** *aɟa*.
 where go-COND.CVB where=CLT good
 ‘There are good wherever they go.’

(Kazama 2008c: 119)

- 6-63) **bi** **xoon** *di-či*, **xoon** *ɲənu-i*.
 1SG.NOM how come-PTCP.PST.1SG how go-PTCP.PRS.1SG
 ‘I go the way I came.’

(Sunik 1985: 88)

b. WH-DEM (non-final/final form)

6-64) **ui** *āpəm-ba-ni* *ǰa-pi*, **ti** *ñĩ-wə* *dūčəčəli* *qāli-ti*.
who hat-ACC-3SG take-COND.CVB that person-ACC tigers want.PTCP.PRS-3PL
‘Tigers want a person whosever hat they take.’

(Sunik 1985: 91)

6-65) **ɲui** *dəŋsi-əsi*, **tu** **nju** *ǰəp-təsi*.
who work-PTCP.PRS.NEG that peron eat-PTCP.PRS.NEG
‘Whoever does not work does not eat.’

(Kazama 2010c: 145)

6.4.3.3. Uilta

No examples of correlatives occur in the Uilta data studied by Petrova (1967) and Ikegami (2002a, 2002b). The correlative expressions in (6-66) and (6-67), however, were obtained from Uilta speakers⁵⁷. According to these elicited data, it may be proposed that Uilta has only the WH-DEM correlative, and not the WH-WH type. Furthermore, either the non-final or final form may appear in the correlative clause.

a. WH-WH

This construction is not attested in the present study.

b. WH-DEM (non-final / final form)

6-66) **xooni** *anana-mi*, **taraŋači** *saa-ru*.
how wish.for-SIM.CVB that.way know-IMP.2SG
‘Understand the way you wish.’

(Yamada fielddata)

6-67) **xaali** *sii* *tədə-li-si*, **təli** *baa-li-si*.
when 2SG.NOM believe-PTCP.FUT-2SG then find-PTCP.FUT-2SG
‘You will find whenever you believe.’

(Yamada fielddata)

⁵⁷ The data on Uilta correlatives were provided by Yoshiko Yamada.

6.4.4. Fourth group

6.4.4.1. Manchu

My observation of written Manchu texts revealed no correlative constructions. Avrorin (2000), however, suggests that Manchu forms correlatives by repeating the same interrogative pronoun in the antecedent and subsequent clauses. He also points out that Manchu correlatives use the conditional converbal form *-č*i** in the correlative clause, which corresponds phonologically with the above-mentioned conditional converbs of other South Tungusic languages (Solon and Hezhen). A summary of the Manchu correlatives identified by Avrorin (2000) appears in Figure 6-4, and examples are given in (6-68) and (6-69).

Figure 6-4. WH-WH correlatives in Manchu (Avrorin 2000: 231)

ai-ai ‘what-what,’ *wə-wə* ‘who-who,’ *aibə-aibə* ‘what.ACC-what.ACC,’ *wəbə-wəbə* ‘whom-whom,’ *wəde-wəde* ‘to who-to who,’ *aimaka-aimaka* ‘how-how,’ *udu-udu* ‘how many-how many,’ *atangi-atangi* ‘when-when,’ *absi-absi* ‘to where-to where,’ *ələ-ələ* ‘at where-at where’

a. WH-WH (non-final form only)

6-68) *sin-də* ***ai-bə*** *čihala-č*i*,* ***ai-bə*** *urunakū* *bu-ki.*
 2SG-DAT what-ACC want-COND.CVB what-ACC surely give-OPT.1
 ‘I will surely give you whatever you want.’

(Avrorin 2000: 232)

6-69) ***absi*** *si* *mim-bə* *sinda-č*i*,* ***absi*** *jo-ki.*
 where 2SG.NOM me-ACC let.go-COND.CVB where go.out-OPT.1
 ‘I want to go wherever you let go of me.’

(Avrorin 2000: 232)

b. WH-DEM

This construction is not attested in the present study.

6.4.4.2. Sibe (IV)

As shown in (6-70), the WH-WH correlative construction is found in the Sibe grammar (Li and Zhong 1986). Furthermore, the WH-DEM type is also confirmed in Sibe, unlike in other South Tungusic languages in the northeastern Chinese province (Solon, Hezhen, and Manchu), as in (6-71). With regard to verb form, the non-final form (the conditional converb in *-čə*) is used in the preceding clause, as in other Tungusic correlatives on the Chinese side.

a. WH-WH (non-final form only)

- 6-70) *amə-ni ai sə-čə, xaxəji-ni ai-w arə-m.*
father-3SG what say-COND.CVB son-3SG what-ACC do-IMPF
'His son does whatever his father says.'

(Li and Zhong 1986: 131)

b. WH-DEM(non-final form only)

- 6-71) *və-i səjən də tə-či=gəl, tərə učun bə učulə-m.*
who-GEN car DAT ride-COND.CVB-CLT that song ACC sing-IMPF
'Whosever cars [one] rides on, [one] sings a song of that person.'

(Ikeda 2000: 185)

6.4.5. Distribution of WH correlatives in the Tungusic languages

Based on the data on correlatives presented above, Table 6-5 shows the syntactic features of Tungusic correlatives in terms of geographical distribution.

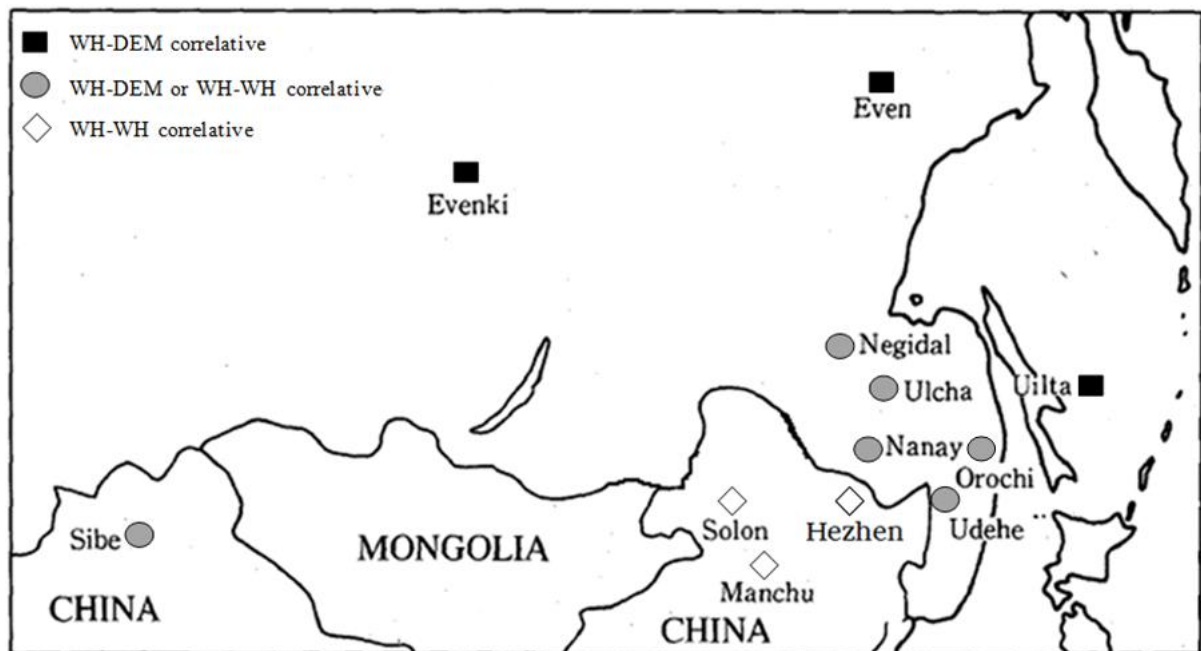
Table 6-5. Syntactic features of correlatives in Tungusic

		correlative type		verb form	
		WH-WH	WH-DEM	non-final	final
N.T.	Ek (I)	-	+	-	+
	E (I)	-	+	-	+
E.T.	N (I)	+	+	+	+
				(COND.CVB - <i>mi</i>)	
	Ol (III)	+	+	+	+
				(COND.CVB - <i>pi</i>)	
	Nn (III)	+	+	+	+
				(SIM.CVB - <i>mi</i>)	
	Oc (II)	+	+	+	+
S.T.				(SIM.CVB - <i>mi</i>)	
	Ut (III)	-	+	+	+
				(SIM.CVB - <i>mi</i>)	
	U (II)	+	+	+	+
				(SIM.CVB - <i>mi</i>)	
	S (I)	+	-	+	-
				(COND.CVB - <i>kki-</i>)	
S.T.	Hz (II)	+	-	+	-
				(COND.CVB - <i>ki-</i>)	
	M (IV)	+	-	+	-
				(COND.CVB - <i>či</i>)	
S.T.	Sb (IV)	+	+	+	-
				(COND.CVB - <i>či</i>)	

6.4.5.1. Distribution of the Tungusic languages in terms of correlative type

The distribution of Tungusic languages according to their types of correlative constructions can be summarized as in Map 6-1.

Map 6-1. Distribution of Tungusic in terms of correlative type



i) WH-DEM only

First, Evenki, Even, and Uilta, distributed in northeastern Siberia and on Sakhalin Island, only admit the correlative construction in which the interrogative pronoun corresponds to a demonstrative.

ii) WH-WH and WH-DEM

Second, it is noteworthy that East Tungusic languages (Negidal, Ulcha, Nanay, Orochi, and Udihe), situated between North and South Tungusic, have a mixture of correlatives of both the Chinese and Russian types. Sibe, spoken in the Xinjiang Uyghur autonomous district in the Chinese territory, is the only South Tungusic language with both types of correlatives.

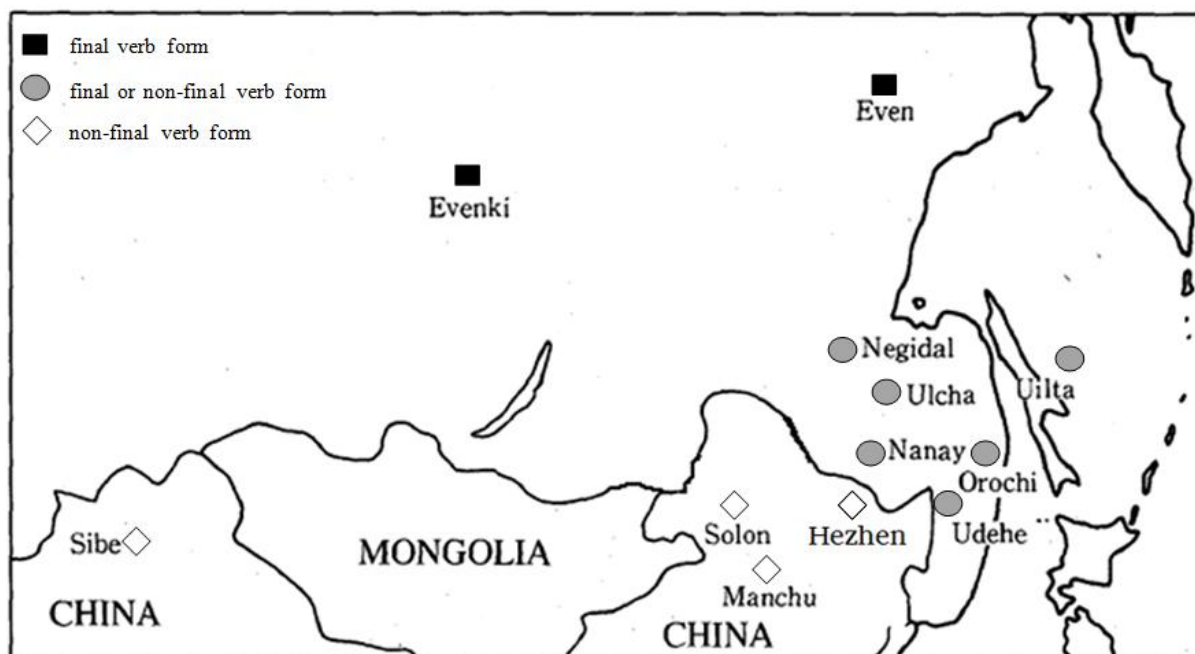
iii) WH-WH only

Finally, the Tungusic languages in the northeastern Chinese province (Solon, Hezhen, and Manchu) have only the WH-WH correlative construction, which does not allow the anaphoric pronoun in the subsequent clause, as does the Russian correlative.

6.4.5.2. Distribution of the Tungusic languages in terms of correlative verb form

Map 6-2 shows the distribution of verb forms in Tungusic correlatives, with consideration of whether or not they can serve as complete sentences.

Map 6-2. Distribution of Tungusic in terms of correlative verb form



i) Final form only

The North Tungusic languages (Evenki and Even) of northeastern Siberia have only the final form in the first correlative clause, which can serve as a complete sentence, as is the case for Russian correlatives.

ii) Final and non-final forms

In contrast, both final and non-final forms in the correlative clause occur in the East Tungusic languages of the Russian territory near the Chinese border (Negidal, Ulcha, Nanay, Orochi, Udihe, and Uilta). Furthermore, it should be stressed that the converbal endings, used in the subordinate clause, universally retain conditional functions.

iii) Non-final form only

The South Tungusic languages in China (Solon, Hezhen, Manchu, and Sibe) have only the non-final form (the conditional converbal ending **-rAk-*) in the relative clause, which cannot stand as an independent sentence.

6.4.5.3. Distribution of the Tungusic correlatives

Although further study is required to support an argument regarding the distribution of correlative constructions in Tungusic languages, it is possible to categorize Tungusic correlative constructions with an interrogative pronoun in terms of the two typological parameters (correlative type and verb form) into three types, namely the Russian type (R: canonical correlative (WH-DEM with a final form)), the Russian + Chinese type (R+C: WH-DEM or WH-WH with either final verb form or non-final conditional form), and the Chinese type (C: conditional-like correlative (WH-WH with a non-final conditional form)⁵⁸). Tables 6-6 and 6-7 present lists of languages in terms of these syntactic characteristics of Tungusic correlatives.

Table 6-6. Type of Tungusic correlative

R	WH-DEM	Evenki	Even	Uilta			
R+C	WH-DEM WH-WH	Negidal	Ulcha	Nanay	Orochi	Udihe	Sibe
C	WH-WH	Solon	Hezhen	Manchu			

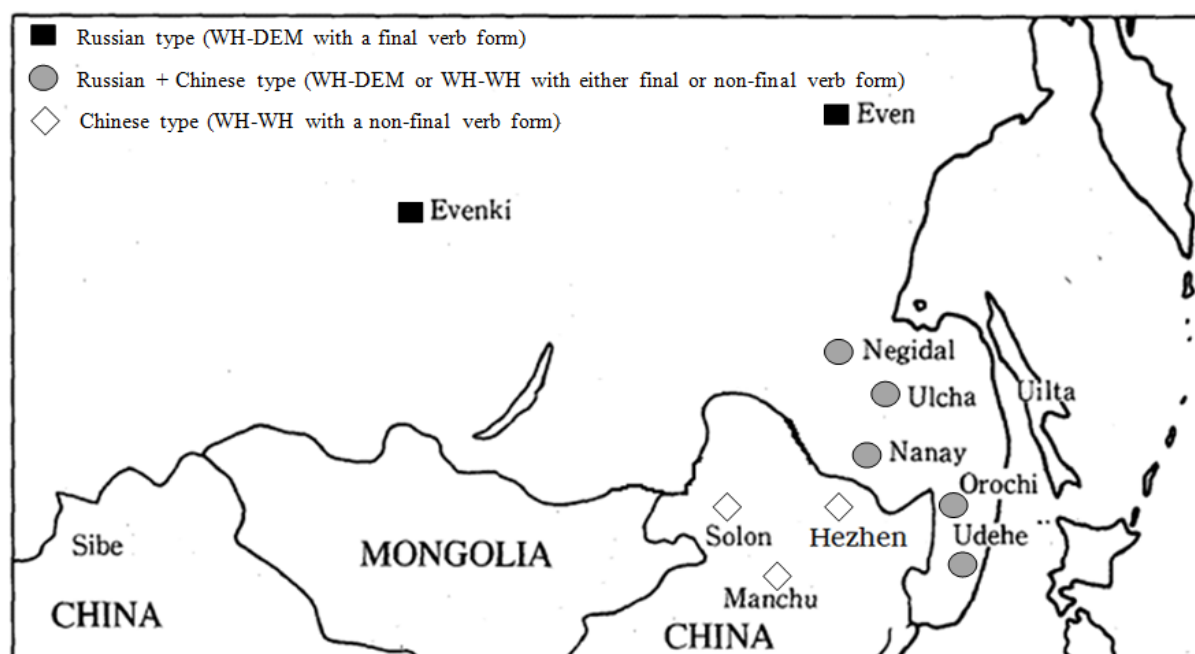
Table 6-7. Verb form of Tungusic correlative

R	final	Evenki	Even				
R+C	final non-final	Negidal	Ulcha	Nanay	Orochi	Udihe	Uilta
C	non-final	Solon	Hezhen	Manchu			Sibe

⁵⁸ Strictly speaking, this classification is problematic, as the verb form in Chinese correlatives has not been determined in this study. Nevertheless, I include the non-final conditional verb form in “the Chinese type” because the appearance of the non-final conditional converb only in the relative clause is close to the original semantic function of Chinese correlatives as WH conditionals (cf. 6.1.1.3). The same phenomenon is also attested in Turkic on the Chinese side.

The data in Tables 6-6 and 6-7 can be schematized as shown in Map 6-3. In summary, correlative constructions in Tungusic exhibit different syntactic characteristics according to geographical distribution, and can be grouped as follows: the Russian canonical correlative type (North Tungusic: Evenki and Even), the Russian canonical correlative, or the Chinese conditional-like correlative type (East Tungusic: Negidal, Ulcha, Nanay, Orochi, and Udehe), and the Chinese conditional-like correlative type (South Tungusic: Solon, Hezhen, and Manchu). Based on the fact that most Tungusic languages share similar syntactic features of correlatives with adjacent major languages, it may be proposed that influence from Chinese and/or Russian correlatives has occurred. However, correlative types in Uilta and Sibe are not strictly consistent with this analysis. Still, verb form in the antecedent clause does coincide with the syntactic patterns of correlatives in the adjoining Tungusic languages.

Map 6-3. Distribution of Tungusic in terms of typological features of correlative constructions



6.5. Correlatives in neighboring languages

In § 6.5, I further examine correlatives in Kolima Yukaghir, Turkic (Sakha, Turkish, Uyghur, and Kazakh) and Mongolic (Buryat, Khalkha, Dagur, and Chahar) to determine whether the above syntactic distinctions of Tungusic correlatives according to

geographical region also apply to correlatives in these neighboring languages, which are in either the Chinese or Russian territories.

6.5.1. Kolima Yukaghir

Maslova (2003) describes two kinds of correlative clauses in Kolima Yukaghir, depending on the syntactic functions (i.e., argument or adjunct) of the correlated elements, namely the “correlative adverbial clause” (as in (6-72)) and the “correlative relative clause” (as in (6-73)). These correlatives are similar in that the WH pronoun correlates with a demonstrative pronoun. Concerning verb form, only the final verb form is used in the subordinate clause. In other words, Kolima Yukaghir correlatives are included in the WH-DEM type in which only final verb forms are employed in the antecedent clause.

a. WH-WH

This construction is not attested in the present study.

b. WH-DEM (final form only)

6-72) *mit qodo modo-jiil'i, taat modo-ŋi tittel.*
 we how sit-INTR:1PL CA live-3PL:INTR they
 ‘They live the way we do.’

(Maslova 2003: 509)

6-73) ...*kin-tek num-met, tamun-pe-ŋin čumu mon-ŋi-k.*
 who-PRED meet-OF.2PL that-PL-DAT all say-PL-IMP.2
 ‘Say all to whomever you meet.’

(Maslova 2003: 511)

6.5.2. Turkic (Sakha, Uyghur, Kazakh)

In 6.5.2, I focus on correlatives in the Turkic languages (Sakha, Uyghur and Kazakh). Before examining correlatives in these Turkic languages closely, the Turkish correlative is briefly introduced. According to Kazama (2003a: 292), Turkish is known to have the WH-DEM type of correlative with only a non-final form (the conditional converb) in the relative clause, as shown in (6-74).

Turkish

a. WH-WH

This construction is not attested in the present study.

b. WH-DEM (final form only)

6-74) *hangisini beğenir-se-n, onu al-ø.*
which.ACC like-COND.CVB-2SG that.ACC take-IMP

‘Take whichever you like.’

(Kazama 2003a: 292)

Likewise, Sakha, spoken in northeastern Siberia, also allows only WH-DEM correlatives, as given in (6-75) and (6-76). However, it is noteworthy that Sakha correlatives take a final verb form in the correlative clause, unlike Turkish.

Sakha⁵⁹

a. WH-WH

This construction is not attested in the present study.

b. WH-DEM (final form only)

6-75) *kim taptuu-r, ol ĵol-loox.*
who love-PRS.3SG that happy-having

‘Whoever loves is happy.’

(Sakha weekly newspaper *Kылым*)

6-76) *kim oton mors-u-n ih-er, ol ualĵu-bat.*
who berry juice-3SG-ACC drink-PRS.3SG that be.sick-NEG.PRS.3SG

‘Whoever drinks a berry juice does not get sick.’

(Sakha weekly newspaper *Kылым*)

In the Uyghur correlative, the WH pronoun in the subordinate clause correlates with a demonstrative pronoun in the superordinate clause, which is likewise a general type, as in the example in (6-78). Erdal (2004) offers a similar explanation regarding Uyghur, as quoted below.

⁵⁹ The data on Sakha correlatives were provided by Prof. Fuyuki Ebata.

Uyghur (like many other Turkic languages) has a two-clause sentence pattern in which the subordinate clause contains or consists of an interrogative-indefinite pronoun and a verb form in -sAr, to which there is explicit (demonstrative) or implicit resumptive reference in the main clause.

(Erdal 2004: 499)

However, some younger generation speakers who have experienced Chinese-oriented education have been confirmed to use the WH-WH correlative, as in (6-77), in everyday conversation. The data in (6-77) to (6-79) were obtained from Uyghur speakers. Regarding the verb form of the relative clause, Uyghur has only the non-final form (the conditional converb in -sA), and does not allow a sentence-final form. This conforms to Turkish correlatives.

Uyghur

a. ?WH-WH (non-final form only)

6-77) ?**kim** baldur tur-sa, **kim** altun ali-ø-du.
 who early get.up-COND.CVB who gold take-IMPF-3
 ‘Whoever gets up early takes gold.’

b. WH-DEM (non-final form only)

6-78) **kim** baldur tur-sa, **šu** altun ali-ø-du.
 who early get.up-COND.CVB that gold take-IMPF-3
 ‘Whoever gets up early takes gold.’

*final-form

6-79) ***kim** baldur **tur-du**, **šu** altun ali-ø-du.
 who early get.up-PRS that gold take-IMPF-3

WH-DEM correlatives, connected by the non-final conditional converbal form, are also attested in Kazakh, as in (6-80) and (6-81).

Kazakh

a. WH-DEM (non-final form)

6-80) *qırmız nıxurlım köp pisi-l-se,*
kumiss how.much a.lot mix-PAS-COND.CVB
soıurlym tuše dāmdi kel-e-di.
that.much not.spicy delicious come-IMPF-3SG
'Kumiss will be as much delicious as [one] mix it.'

(Nakashima 2013: 157-158)

6-81) *ne ek-se-ı,* *sonı orar-sıı.*
what plant-COND.CVB-2SG that.ACC harvest.PRS-2SG
'You harvest whatever you plant.'

(Geng and Li 1985: 160)

In short, WH-DEM correlatives are considered to be a general correlative type in Turkic, considering their consistency in Sakha, Turkish, Uyghur, and Kazakh. Nevertheless, the WH-WH type is also found among some younger Uyghur speakers, influenced by Chinese. As for verb forms in correlative clauses, different phenomena are observed in Sakha in comparison to other Turkic languages (Turkish, Uyghur, and Kazakh). Specifically, the non-final form, i.e., the conditional converb, is generally used to constitute the correlative clause in most of the Turkic languages, whereas the employment of the sentence final form in the subordinate clause is limited to Sakha correlatives.

6.5.3. Mongolic (Buryat, Khalkha, Dagur, and Chahar)

In this study, I survey correlative clauses in the following neighboring Mongolic languages (Buryat, Khalkha, Dagur, and Chahar). Firstly, referring to the descriptive grammars of Poppe (1960) and Bertagaev and Cydendambaev (1962), and textual data (Barannikova et al. 1993 and 2000), correlatives in Buryat are characterized as the WH-DEM type, as in (6-82) and (6-83). In contrast, the WH-WH correlative does not occur in Buryat. Turning to verb forms in the antecedent clause, only final forms are verified in Buryat correlatives.

Buryat

a. WH-WH

This construction is not attested in the present study.

b. WH-DEM (final form)

- 6-82) **xen** *žoloošo* *bolo-hon* *belei,* **tere** *tende* *oršo-no*.
who driver become-PTCP.PST PST.PART that there stay-N.PST
‘Whoever became a driver stays there.’

(Poppe 1960: 128)

- 6-83) **jamar** *šyleg* *unšaab-ši,* **terenee** *unšiış.*
which poem.ACC read.PST-2SG that.ACC read.IMP.2SG
‘Read whichever poem you read.’

(Poppe 1960: 128)

Secondly, as in the case of Buryat, Khakha Mongolian has the WH-DEM correlative but does not allow the Chinese correlative type (WH-WH). Concerning verb forms, either the non-final (conditional converbal ending *-baI-*) or the final forms (participle or finite verb) are employed in the relative clause, as shown by the examples in (6-84) and (6-85). Thus, the Khakha correlative permits the WH-DEM type with either the non-final or final verb forms in the subordinate clause.

Khalkha

a. WH-WH

This construction is not attested in the present study.

b. WH-DEM (non-final/final form)

- 6-84) **xedii** *olon* *bai-val,* **tödii** *sayin.*
how.much a.lot be-COND.CVB that.much good
‘The more, the better.’

(Hasumi 1998: 36)

- 6-85) **xedii** *olon* *bai-n,* **tödii** *sayin.*
how.much a.lot be-N.PST that.much good
‘The more, the better.’

(Hasumi 1998: 36)

Thirdly, in Dagur inside the Chinese border, WH-WH correlatives occur frequently, according to the data of Enhebatu et al. (1985) and Yamada (2015), as in (6-86) and (6-87). In terms of verb forms, the non-final (conditional converb in *-(g)AAs*) form appears in Dagur correlatives.

Dagur⁶⁰

a. WH-WH (non-final/final form)

- 6-86) *anii ul wəild-əəs-əə, anii badaa buu idəə.*
 who NEG work-COND.CVB-REF who meal NEG eat.IMP.EMPH
 ‘Whoever does not work, does not eat meal.’

(Yamada 2015: 202)

- 6-87) *xər xii-rəəs, xər ič-bəi-ø.*
 how do-COND.CVB how go-N.PST-3
 ‘(Raft) goes the way (one) does.’

(Enhebatu et al. 1985: 259)

b. WH-DEM (non-final form)

Lastly, Chahar Mongolian, one of the Mongolic dialects spoken in China, retains the WH-WH correlative, as do Chinese Tungusic languages, as illustrated in (6-88) and (6-89). Nevertheless, unlike the South Tungusic languages in the northern Chinese region, the WH-DEM correlative is also possible in Chahar, as in (6-90). As far as verb form in the relative clause is concerned, correlatives in Chahar can take either the non-final form (the conditional converb *-baI* or conditional particle *-bol*) or the final form (the participle) in the subordinate clause.

Chahar

a. WH-WH (non-final/final form)

- 6-88) *xedii olon bai-bal, xedii sayin.*
 how.much a.lot be-COND.CVB that.much good
 ‘The more, the better.’

(Hasumi 1998: 36)

⁶⁰ According to Enhebatu et al. (1985), the WH-DEM type of correlative is not attested. Nevertheless, there is a possibility of such a correlative type from the consistent existence of WH-DEM in other adjacent Mongolic languages.

6-89) *xen bodo-ju garga-san, xen minii asuultan du qariul.*
 who think-IMPF.CVB go.out-PTCP.PST who I.GEN question DAT answer.IMP
 ‘Whoever organized thoughts answers to my question.’

(Hasumi 1998: 36)

b. WH-DEM (non-final form)

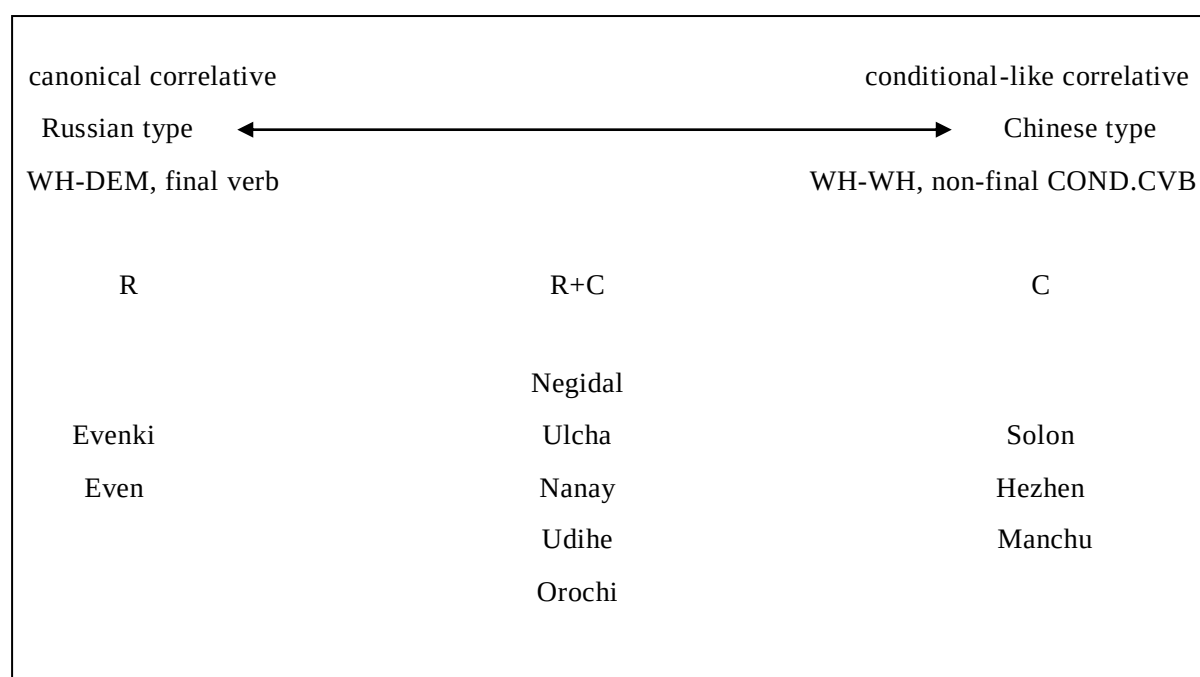
6-90) *xen erte bos-bal, tere alta olu-na.*
 who early get up- COND.CVB that gold take-N.PST
 ‘Whoever gets up early takes a gold.’

(fielddata)

In sum, WH-DEM correlatives generally occur in Mongolic, whereas WH-WH type correlatives are restricted to Dagur and Chahar inside the Chinese border. In addition, correlatives in Khalkha and Chahar are commonly formed by either the non-final or final verb form in the antecedent clause, whereas only the final form occurs in Buryat correlatives. With regard to Dagur, non-final conditional converbal form is adopted in WH-WH correlatives.

6.6. Conclusions

Figure 6-5. The continuum of Tungusic correlatives



In this chapter, employing two typological parameters of correlatives, I focused on the syntactic features of correlative constructions to examine the possibility of language contact between Tungusic and either Russian or Chinese from the perspective of areal linguistics. The investigation shows that, according to the location of each language, Tungusic correlatives can be arranged in a continuum, as shown in Figure 6-5.

Firstly, North Tungusic (Evenki and Even) is exclusively revealed as having the Russian type of canonical correlative (WH-DEM with a final verb form). In contrast, conditional-like correlative (WH-WH correlatives with a non-final verb form), represented as the Chinese type, are concentrated in South Tungusic (Solon, Hezhen, and Manchu) in the northeastern Chinese province. Lastly, a mixture of Russian and Chinese correlatives, i.e., WH-DEM or WH-WH with either final or non-final verb forms, occurs in East Tungusic languages (Negidal, Ulcha, Nanay, Orochi, and Udihe). In conclusion, Tungusic differs in terms of the syntactic patterns of correlatives on the basis of geographical region, and the languages may be classified into three groups, namely North Tungusic (R), East Tungusic (R+C), and South Tungusic (C). Accordingly, given that each Tungusic language has correlatives similar to those in the adjacent major languages, the author proposes that the areal-centered syntactic variations of correlatives in Tungusic may be attributed to influence from Russian and Chinese. Nonetheless, note that Sibe in the Xinjiang Uyghur autonomous district, allowing the WH-DEM type of correlative, and Uilta, the only East Tungusic language without the WH-WH correlative, do not fully follow the above generalization. This may suggest that the influence of the Chinese correlative has not affected the Uilta correlative, and that the WH-DEM correlative in Sibe originates from the neighboring Turkic influence with WH-DEM as a general correlative type.

Regarding contiguous languages, Kolima Yukaghir and Sakha, neighboring with Evenki and Even, commonly possess the WH-DEM correlative with a final verb form, i.e., the same canonical correlative patterns as the Russian type. In addition, Buryat and Dagur, from the adjacent Mongolic languages, respectively show the syntactic feature of Russian and Chinese correlatives. However, the WH correlatives in Khalkha and Chahar show no striking similarity with the Russian and Chinese types from an areal typological perspective, except that Chahar, inside the Chinese border, shares the WH-WH type of correlatives of Chinese. With regard to Turkic on the Chinese side, Uyghur or Kazakh

have in common that verb forms in the correlative clause are expressed by non-final conditional converbal forms, as is the case in South Tungusic. Note that the Chinese WH-WH correlative type is verified in some speakers of Uyghur. In summary, Kolima Yukaghir, Sakha, Buryat and Dagur can be regarded from an areal typological perspective as being related to the Russian and Chinese correlatives, respectively. Furthermore, the use of conditional converbs in Uyghur and Kazakh correlatives, unlike the limit to final forms in Sakha correlatives, coinciding with that of South Tungusic languages, can also be understood as an areal-based distinction among the Turkic languages. Moreover, WH-WH correlatives in Mongolic and Turkic within the Chinese territory provide further evidence of language contact with the Chinese correlative. Thus, syntactic distinctions in correlatives, i.e., correlative type and/or verb form in the subordinate clause, are considered to correlate either fully or partially with geographical distribution among neighboring Kolima Yukaghir, Mongolic, and Turkic languages.

Chapter VII Conclusions

Chapter VII

Conclusions

The present dissertation has discussed the four syntactic features of Tungusic from the perspective of areal linguistics, centering on the Bikin dialect of Udihe. This concluding chapter is composed of three parts as follows: § 7.1 summarizes the main findings of each investigation; in § 7.2, I give implications of the results; lastly, § 7.3 describes limitations of this study and suggests directions for further research.

7.1. Summary of the main findings

In § 7.1, the main points of the four studies in this dissertation, namely (i) third person marking on finite indicative forms, (ii) the converbal ending **-mi*, (iii) conditional forms, and (iv) correlatives, are summarized here.

(i) Third person marking on finite indicative forms

As a result of examining Tungusic using four typological parameters (obligatorily distinct, optionally distinct, non-distinct, and non-person marking), Tungusic was confirmed to differ in third person marking on finite indicative forms depending on areal basis, as indicated in Figure 7-1.

Figure 7-1. Third person marking on finite indicative forms in Tungusic and neighboring languages

· obligatorily distinct	N.T. (Evenki, Even, Negidal)	Kolima Yukaghir, Sakha, Russian
· optionally distinct	E.T. (Ulcha, Nanay, Uilta, Udihe)	Buryat, Dagur
· non-distinct	S.T. (Solon, Hezhen)	Kazakh, Uyghur
· non-person marking	S.T. (Manchu, Sibe)	Khalkha, Chinese

First, Evenki, Even, and Negidal, spoken in the northern region of Russia, are consistent with neighboring languages (Kolima Yukaghir, Sakha, and Russian) in that their number oppositions between third person singular and plural are obligatorily distinct. Second, East Tungusic corresponds with the adjacent Mongolic (Buryat and Dagur), given that the two language groups belong to the zero or 3PL-marking in number marking. That is, they are optionally distinct types of languages in terms of number distinction. The third group of Tungusic (Ulcha, Nanay, and Uilta) and these Mongolic languages show noticeable commonalities, in that third person plurals are optionally marked by the nominal plural suffix. Udihe, however, employs the unusual method of denoting the third person plural with the verbal derivational suffix *-du*, in contrast with other East Tungusic languages. It is presumed that Udihe lost the nominal plural suffix *-l*, used for third person plural marking in other East Tungusic languages, in phonological change processes. In South Tungusic, third person marking in Solon and Hezhen is classified as non-distinct. This is also the case in Uyghur and Kazakh, which do not distinguish third person singular and plural either. Interestingly, these two language groups have no direct contact, but are both prevalent inside the Chinese territory. The remaining South Tungusic languages, Manchu and Sibe, are both non-person marking types of language, along with the neighboring Chinese and Khalkha Mongolian. In conclusion, third person marking on Tungusic finite indicative forms indicates different patterns depending on areal position, such that adjoining languages have striking parallels to each other.

(ii) Converbal ending **-mi*.

The **-mi* form, one of the most frequently-used converbal endings in Tungusic, showed functional differences along the morpho-syntactic and semantic parameters, namely number marking, auxiliary verb structure, grammaticalization of speech verbs, purposive, and conditional, depending on areal position.

First, as presented in Figure 7-2, number marking in the **-mi* converb can be divided into three types: nominal plural marking (Evenki), reflexive plural marking (Negidal, Ulcha, Nanay, Orochi, Uilta, and Udihe (Xor)), and non-plural marking (Udihe (Bikin), Solon, Hezhen, Manchu, and Sibe). Among these types, the plural marking for the converbal form **-mi* in North and East Tungusic is presumed to be an internal change rather than a contact-based influence from other languages, because similar

phenomena are not observed in adjacent languages. Nonetheless, note that the non-plural marking of the **-mi* in Even is similar to the imperfective converb in Kolima Yukaghir. Moreover, as far as South Tungusic is concerned, the lack of plural marking in the converbal ending **-mi* conforms to those of imperfective converbs in Mongolic.

Figure 7-2. Number marking in the Tungusic **-mi* and in the imperfective converbs in neighboring languages

· nominal plural marking	N.T. (Evenki)	
· non-plural marking	N.T. (Even)	Kolima Yukaghir
· reflexive plural marking	E.T. (Negidal, Ulcha, Nanay, Uilta, Orochi, Udihe (Xor))	
· non-plural marking	S.T. (Udihe (Bikin), Solon, Hezhen, Manchu, and Sibe)	Mongolic

Second, Figure 7-3 and 7-4 illustrate that the converbal element **-mi* not only combines with different types of auxiliary verbs to create capable auxiliary verb structures, but also retains distinct degrees of development in the formation of auxiliary verb structures, depending on geographical region. Specifically, auxiliary verb structures with the **-mi* form in North Tungusic is limited to negative capable and completive auxiliary verb structures in which the converb in **-mi* functions similarly to infinitive verbs at the syntactic level. The existence of negative capable auxiliary verb structures is close to that in the Mongolic languages (Buryat and Khalkha). On the contrary, auxiliary verb structures employing the converb **-mi*, either inceptively, completively, positive-capably or progressively, attemptively, benefactively, or perfectly, are highly developed in South Tungusic, as is the case in Mongolic and Chinese. In East Tungusic, inceptive, completive, positive-capable, and progressive auxiliary verb structures formed by the converb in **-mi*, are taken as middle degrees of development in comparison with North and South Tungusic, which can be interpreted as partially influenced by Mongolic and Chinese languages.

Figure 7-3. Verb types for capable auxiliary verb structure in analytic combination with the Tungusic **-mi* and in the imperfective converbs in neighboring languages

· ‘unable’	N.T. (Evenki, Even, Negidal), E.T. (Uilta) (* <i>alba-</i> ‘unable’)	Mongolic (Buryat, Khalkha)
· ‘able’ or ‘understand’	E.T. (Ulcha, Nanay, Uilta, Orochi, Udihe) (* <i>mutə-</i> ‘able’, * <i>ulxi-</i> ‘understand’)	Mongolic, Chinese
· ‘able’, ‘understand’, ‘obtain’, ‘know’, ‘become’	S.T. (Solon, Hezhen, Manchu, and Sibe) (* <i>mutə-</i> ‘able’, * <i>ulxi-</i> ‘understand’, * <i>baka-</i> ‘obtain’ or * <i>bahana-</i> ‘know’, * <i>o-</i> ‘become’)	Mongolic, Chinese

Figure 7-4. Development of auxiliary verb structures in analytic combination with the Tungusic **-mi* and in the imperfective converbs in neighboring languages

· Low (0-2)	N.T. (Evenki, Even, Negidal)	Kolima Yukaghir, Sakha, Russian
· Middle (4-5)	E.T. (Ulcha, Nanay, Uilta, Orochi, Udihe)	Mongolic, Chinese
· High (7-9)	S.T. (Solon, Hezhen, Manchu, and Sibe)	Mongolic, Chinese

Third, Figure 7-5 indicates that speech verbs in the converbal form **-mi*, which grammatically functions as an index of quotative or complement clauses, are not found in North Tungusic, except in Western Even, which is similar to Kolima Yukaghir and Sakha. In contrast, such a syntactic structure is confirmed in East and South Tungusic. Specifically, the grammaticalization of speech verbs plus the converbal ending **-mi* is conspicuously developed in South Tungusic (Hezhen, Manchu, Sibe) compared to partial development of relatively low frequency in East Tungusic (Ulcha, Nanay, Uilta), with the exceptions of Udihe and Orochi. These results may also reflect that areal factor is

strongly associated with the different development of grammaticalization by speech verbs in the converbal form **-mi* among Tungusic, given that the imperfective converbs, added to speech verb, in Mongolic are commonly and frequently used to mark a quotative and complement clause, corresponding with the counterparts in the neighboring South Tungusic languages.

Figure 7-5. Grammaticalization of speech verbs in the Tungusic **-mi* and in the imperfective converbs in neighboring languages

· non-existent	N.T. (Evenki, Negidal)	Russian
	N.T. (Even)	Kolima Yukaghir, Sakha
· existent	E.T. (Ulcha, Nanay, Uilta) relatively-low	Mongolic
	S.T. (Hezhen, Manchu, Sibe) relatively-high	Mongolic

Regarding purposive structure, most Tungusic languages form motions purposive constructions with the converb in **-mi*. However, as shown in Figure 7-6, there is a syntactic difference in the formation of purposive structure by the **-mi* form. The converbal ending **-mi* in South Tungusic has a tendency to solely constitute motion purposive without the use of the directional-intentional suffix **-nA* or **-ndA* in comparison with Tungusic inside the Russian territories. General purposive structures, using the converb in **-mi*, are limited to Manchu and Sibe, whereas extra purposive converbs are used for this semantic effect in North and East Tungusic. The author supposes that syntactic features of the converbal ending **-mi*, i.e., the non-use of the directional-intentional suffix in South Tungusic and the formation of either motion or non-motion purposive structures in Manchu and Sibe, are attributable to the creation of motion or general purposive structures by consecutive juxtaposition of two verbs in Chinese.

Figure 7-6. Purposive function in the Tungusic **-mi* and in the imperfective converbs in neighboring languages

· motion purposive with <i>*-nA</i>	N. T. (Even)	
general purposive	purposive converb	
· motion purposive with <i>*-nA</i> or <i>*-ndA</i>	E. T. (Negidal, Ulcha, Nanay, Orochi, Uilta, Udihe)	
general purposive	purposive converb	
· motion purposive without <i>*-nA</i>	S.T. (Solon, Hezhen, Manchu, Sibe)	
· motion and general purposive	S.T. (Manchu, Sibe)	Chinese

Lastly, as shown in Figure 7-7, the converbal ending **-mi* universally functions as a same-subject conditional marker in North and East Tungusic languages. In contrast, such a conditional function with the employment of the converb in **-mi* does not occur in South Tungusic in the Northern Chinese province, which corresponds with the imperfective converbs in Mongolic. Moreover, there is a gap between North and East Tungusic in terms of unreal conditionals. The converbal form **-mi* in East Tungusic languages (Nanay, Ulcha, and Udihe) is generally restricted to real conditionals, whereas the corresponding form in North Tungusic can form either real or unreal conditionals in coreferential circumstances.

Figure 7-7. Conditional function in the Tungusic **-mi* and in the imperfective converbs in neighboring languages

· real or unreal conditional	N.T. (Evenki, Even, Negidal)	
· real or unreal conditional	E.T. (Orochi, Uilta?)	
· real conditional	E.T. (Ulcha, Nanay, Udihe)	
· non-conditional use	S.T. (Solon, Hezhen, Manchu)	Mongolic

Thus, the above-mentioned morpho-syntactic and semantic differences of the converbal ending **-mi* among the Tungusic languages are highly related to different degrees of influence from neighboring Mongolic or Chinese. These degrees of influence form three groups: North Tungusic: low, East Tungusic: middle, and South Tungusic: high. Within North Tungusic (in particular Even), the cosharing of similar grammatical phenomena is limited to Kolima Yukaghir and Sakha.

(iii) Conditional forms

Figure 7-8. Conditional forms in Tungusic and neighboring languages

· SS ↔ DS (real or unreal)	N.T. (Evenki, Even, Negidal)	Kolima Yukaghir
· SS ↔ DS (real or unreal), SS ↔ DS (real)	E.T. (Orochi, Uilta)	
· SS ↔ DS (real), COP.COND.PART	E.T. (Ulcha, Nanay, Udihe)	Mongolic
· VS (real or unreal), COP.COND.PART	S.T. (Solon, Hezhen, Manchu, Sibe)	Mongolic

As illustrated in Figure 7-8, conditional forms in Tungusic show remarkable variation on the basis of areal distribution in terms of switch-reference and semantic types for conditionals. First of all, the conditional converbal endings **-mi* (SS) and **-rAk-* (DS) in North Tungusic (Evenki, Even, and Negidal), in both real and unreal conditionals, are clearly distinguished by a switch-reference contrasts, as is the case in neighboring Kolima Yukaghir. However, the switch-reference system does not function at all in conditional forms of South Tungusic, despite the fact that conditional forms are phonologically related by the DS conditional converbal ending **-rAk-* in North Tungusic. Furthermore, the copular verbs in conditional converbs serve as VS conditional particles in these Tungusic languages. These characteristics of conditional elements in South Tungusic are remarkably equivalent to those of neighboring Mongolic languages. Lastly, East Tungusic retains an opposition of switch-reference in conditional converbs **-pi* (SS) and **-bučA-* (DS). Moreover, East Tungusic is mixed with regard to

retention of the DS conditional converb **-rAk-*. Nanay, Ulcha, and Udihe, lacking the DS conditional converb **-rAk-*, possess copular-based conditional particles (e.g., *osini*, *bisi*) to form mainly unreal conditionals, which are similar to conditional particles in Mongolic. Conditional forms in Uilta and Orochi, maintaining the DS conditional converb **-rAk-*, are generally distinguished by conjunction or disjunction in the subordinate and main clauses, just as in North Tungusic languages. Thus, conditional elements in Tungusic display different patterns according to geographical location, and this variation is presumed to arise from the influence of the neighboring Mongolic languages. In the case of East Tungusic, the possession of the DS conditional converbal ending **-rAk-* is also considered to be related to the differences among conditional forms, as well as be partially influenced by Mongolic.

(iv) Correlatives

Figure 7-9. Correlatives in Tungusic and neighboring languages

Russian canonical correlative (WH-DEM with a final verb form)	N.T. (Evenki, Even)
Russian or Chinese correlative (WH-DEM or WH-WH with a final or non-final form)	E.T. (Negidal, Ulcha, Nanay, Orochi, Udihe)
Chinese conditional-like correlative (WH-WH with non-final conditional converbal form)	S.T. (Solon, Hezhen, Manchu)

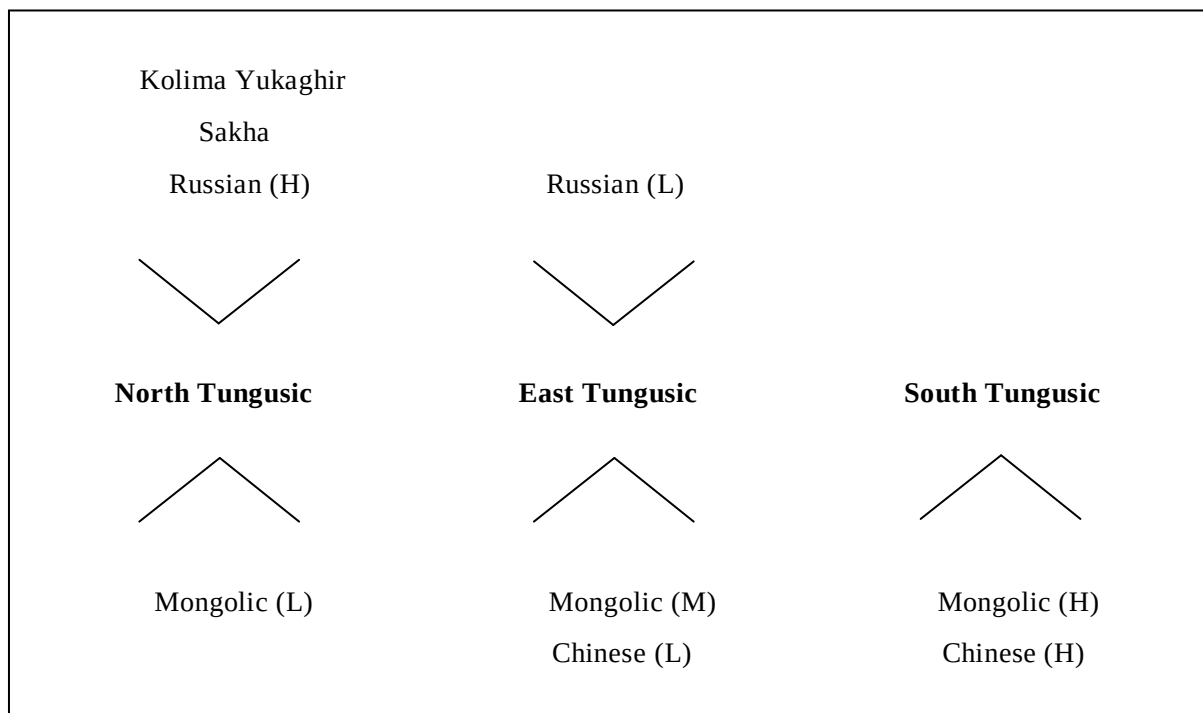
Figure 7-9 explains that Tungusic correlatives can be generally classified into three groups depending on the correlative type and verb form in relative clauses: i) North Tungusic (Evenki, Even): Russian canonical correlative type (WH-DEM with a final verb form), ii) East Tungusic (Negidal, Ulcha, Nanay, Orochi, Udihe): Russian canonical or Chinese conditional-like correlative type (WH-DEM or WH-WH with either final verb form or non-final conditional form), and iii) South Tungusic (Solon,

Hezhen, and Manchu): Chinese conditional-like correlative type (WH-WH with non-final conditional form). Thus, correlatives in Tungusic demonstrate syntactic distinctions on the basis of areal position, showing prominent similarities with neighboring Russian and Chinese correlatives.

7.2. Implications

The above findings demonstrate that the different syntactic characteristics of Tungusic languages rely on geographical distribution and are, in general, classified into three types: i) North Tungusic, ii) East Tungusic, and iii) South Tungusic. Notice that Negidal is mixed, behaving like either North or East Tungusic, depending on linguistic factors.

Figure 7-10. Influence hierarchy of neighboring languages on Tungusic depending on geographical distribution from the perspective of areal linguistics (H: high influence, M: middle influence, and L: low influence)



First, North Tungusic shares syntactic features with Kolima Yukaghir, Sakha, Russian, and Mongolic. Second, East Tungusic shows similar syntactic phenomena as Russian, Mongolic, and Chinese at low or intermediate levels, in comparison with North

and South Tungusic. Finally, South Tungusic languages are strongly influenced by Mongolic and Chinese. I should stress that the degree of influence from Russian, Mongolic, and Chinese vary according to the distribution of each Tungusic group. In conclusion, as illustrated in Figure 7-10, the areal-based grammatical distinctions among Tungusic are attributed to the influences from different neighboring languages and distinct degrees of influence from the same adjacent languages.

7.3. Limitations and further study

The present thesis has the following limitations and raises the following opportunities for further study. First, this study focuses on descriptive grammars, previous studies, and textual materials on the Tungusic language, including fieldwork data on Bikin Udihe. There may thus be inconsistencies in quality and quantity of Tungusic linguistic data, as some of the languages are not fully described. In other words, conclusions about typological parameters of certain Tungusic languages have been made with restricted data. Second, the present study discusses the Tungusic languages as a whole, without thoroughly examining the dialect differences in every Tungusic language. In this respect, Evenki may be an interesting case study, since each dialect spreads across vast areas from northern Siberia, to the Amur region, to northern China. Further fieldwork and surveys are necessary to further explore these issues. Third, this study does not cover the possible language contact between Nivkh or Ainu and Tungusic, which deserves attention, particularly with regard to East Tungusic (the third group of Tungusic). Finally, only four syntactic characteristics were examined in this thesis. There are many more grammatical distinctions among Tungusic languages that can be explained through the framework of areal linguistics. It is our hope that the present study will both encourage more descriptive fieldwork on Tungusic, and be of use to the field of areal linguistics in Tungusic.

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