

## Finiteness in Sibe: Aspects of Finiteness and Historical Development

KOGURA, Norikazu  
ILCAA, Tokyo University of Foreign Studies

The main aim of the present paper is to discuss the finiteness of the three forms of indicatives (*i*-forms, *ŋe*-forms, and simple forms) in Sibe. The three forms seem to correspond to participles (simple forms), verbal nouns (*ŋe*-forms), and finite verbs (*i*-forms) in the literature owing to their syntactic characteristics. The present paper mainly examines the characteristics of the three forms in morphology, syntax, prosody, and function, as well as the historical development of the three forms, and argues two points: i) in Sibe, finiteness is seen as a bundle of morphological, syntactic, prosodic, and functional features, and of those four features, the syntactic and prosodic features can be well described by regarding them as secondary features that are motivated by the functions, which, in turn, are denoted by the morphological markings; ii) simple forms should be seen as finite, at least at the stage before the development of *ŋe*-forms and *i*-forms; moreover, the *ŋe*-forms and *i*-forms developed through the re-finitization of simple forms. The re-finitization is in functional terms the acquisition of a device for marking information structure in the conversation.

**Keywords:** Sibe (Tungusic), finiteness, nominalization, re-finitization, information

1. Introduction
2. Theoretical background
3. Characteristics of the three indicative forms
4. The finiteness of the three indicative forms
5. Conclusion

### 1. Introduction

Sibe<sup>1</sup> (Xibo, Xibe) is a member of the Tungusic (or Manchu-Tungusic) languages spoken in Xinjiang Uighur Autonomous Region in China. Sibe has more than 20,000 speakers. Sibe is relatively close to Manchu within the Tungusic languages, and is also

---

KOGURA, Norikazu. 2019. "Finiteness in Sibe: Aspects of finiteness and historical development". *Asian and African Languages and Linguistics* 13. pp.81–112. <https://doi.org/10.15026/92952>.

<sup>1</sup> This work was supported by JSPS KAKENHI Grant Numbers 16H05672, 18K12364, and the ILCAA Joint Project "Typological Study on 'Altaic-type' Languages."

In the present paper, Sibe forms are written using phonemic transcription, which is based on Kubo et al. (2011). The phonemic inventory of Sibe is as follows: /a, e, i, o, u, p, b, t, d, k, g, q, G, f, s, x, ʧ, X, š, c, j, r, l, m, n, ŋ, N, y, w/. Here /X/ stands for the archphoneme of /x/ and /χ/. In addition, "´" stands for marked accent, "-" stands for a suffix boundary, "—" stands for a clitic boundary, and "#" stands for a word boundary in phonological compounds, which have mainly come from Chinese.

called Spoken Manchu in some literature. Sibe and Manchu are thought to be genetically far from other Tungusic languages. In fact, they differ a lot in terms of morphology and syntax: unlike other Tungusic languages, they lack person agreement marked on the head of nominal phrases and various clauses. However, the process of how Sibe and Manchu have developed is still not clear. This is partially due to the fact that Sibe and Manchu have experienced rather complicated language contact, but also that the description of Tungusic languages has been conducted under rather different frameworks. Thus, for the investigation of the historical development of Tungusic languages, in particular Sibe and Manchu, it is necessary to conduct a description of the common ground in terms of morphology and syntax.

The aim of the present paper is to examine the finiteness of verbal forms and clauses in Sibe, with a focus on three forms in the indicative mood (*i*-forms, *ŋe*-forms, and simple forms). At a glance, these forms might seem to correspond to finite verbs, verbal nouns, and participles, respectively, in the theoretical literature, based on their syntactic functions. However, considering their synchronic characteristics and historical development, it seems not adequate to simply assume finite verbs as finite and other forms as nonfinite. In the present paper, I will examine the characteristics of the three forms in terms of their morphology, syntax, prosody, and function, and show that, in Sibe, the characteristics of the three forms in terms of these four aspects are related to one another, and in particular are motivated by the functions of the three forms. In addition, I will also argue that in Sibe, verbal nouns and finite verbs seem to have developed from participles. The main proposals of the present paper are that, in Sibe, i) finiteness should be defined based on function, and ii) participles and verbal nouns in addition to finite verbs should be seen as finite, because historically verbal nouns and finite verbs developed from participles, which historically were finite, through the process of re-finitization. This re-finitization was essentially the acquisition of information structure in functional terms.

The configuration of the present paper is as follows: the second section presents the theoretical framework and reviews the literature for the discussion of finiteness in Sibe; the third section examines the characteristics in terms of morphology, syntax, prosody, and function of the three forms; and the fourth section discusses the finiteness of the Sibe forms by considering their historical development. The fifth section concludes the paper.

## 2. Theoretical background

### 2.1. Theoretical issues related to finiteness

As is mentioned in Nikolaeva (2007b, 2010), finiteness was originally discussed in terms of verbal morphology that differentiates between indicatives, which occur in main clauses, and participles, verbal nouns and infinitives, which occur in subjunctive clauses. The

difference between indicatives and the other forms has been argued in terms of the presence or absence of certain morphological categories, in particular tense and person. It has been argued that non-finite verbal forms such as participles, verbal nouns, and infinitives often lack morphological categories such as tense or person, which are present in finite forms such as indicatives; in this view, non-finite forms only have categories such as aspect, polarity, and so on.

Finiteness has also been discussed in terms of syntax. Here finiteness is seen as a property of a clause, along with other syntactic features such as the case of nominal arguments, in addition to which finite and non-finite verbal forms occur in the predicate. If a verbal form can only occur in subordinate clauses such as relative clauses or nominal clauses, but cannot occur in main clauses, then the form is seen as non-finite; in contrast, if a form can occur in main clauses, the form is seen as finite. In some cases, a verbal form can occur not only in main clauses, but also in various kinds of subordinate clauses. In such cases, the form is less finite, and can therefore be said to have a low degree of finiteness.

Finiteness may be viewed as a discrete notion; however, in many cases, the distinction of finite and non-finite verbs cannot be seen as discrete but instead as gradable, in particular when there are more than two types of forms related to finiteness in a language. In such cases, the different types of forms are seen to exhibit different degrees of finiteness. For example, Malchukov (2004, 2006) proposes a hierarchy of the categories involved in the processes of nominalization and verbalization.

Finiteness, in particular that of clauses, may change through synchronic and diachronic processes. Insubordination (Evans 2007; Evans and Watanabe 2016b; Robbeets 2009, 2013, 2016, 2017; Malchukov 2013), a process by which subordinate clauses come to obtain features of finite clauses, is one such process.

Nominalization, a process which makes nominal clauses out of other kinds of clauses, is also often seen as de-finitization, because in some languages nominalization is applied to finite clauses, and as a result, the nominalized clauses lose some of their finite features, and in some cases become further embedded in other clauses. Malchukov (2004, 2006) describes the process in contrast to verbalization, which is related to the process by which a clause obtains some verbal (finite) features in terms of morphology and syntax. In Malchukov (2004, 2006), nominalization is seen as a process of de-finitization, and verbalization is seen as finitization, and thus the nominal/verbal syntax seems to be connected to finiteness. However, as is suggested by Givón (2001, 2016), there are also some cases of (re-)finitization which yield more finite clauses out of nominalized, less finite clauses without losing the nominal syntax of the clauses. Thus, nominalization and verbalization are not always connected to finiteness and thus they should be seen independent processes.

Finiteness also seems to be connected to functional features of clauses, in particular to the informational status of clauses. Lambrecht (1994) argues that the nominalization of finite clauses relates to the communicative functions of presupposition and assertion: in particular nominalization is a kind of process that makes a proposition non-asserted. It has also been argued for many languages that nominalized clauses which come into being as a result of nominalization often carries given/old information, which is presupposed by interlocutors, as opposed to the original clauses which carry new information (Lambrecht 1994). Here it is supposed that, in functional terms, finite clauses carry new information, and assert this new information by combining it with illocutionary forces.

## 2.2. Finiteness in Sibe

This section provides an overview of the issues related to finiteness in Sibe, which will be discussed in more detail in the following sections. Sibe has several types of verbal forms that seem to be related to finiteness, such as indicative mood, verbal nouns, participles, and converbs. Of these forms, I will focus specifically on the finiteness of indicatives, verbal nouns, and participles in the present paper.

First, in terms of morphology, Sibe doesn't seem to have a category of person that is marked on the predicates of clauses. In addition, clauses in which participles, verbal nouns, and finite verbs occur in the predicates share the same type of TAM markings. Thus, in Sibe, it is not possible to demonstrate the finiteness of participles, verbal nouns, and finite verbs based on TAM and person marking. However, as verbal nouns and finite verbs have markings that denote the epistemic status of the clause, and which carry information in the conversation, it is possible to demonstrate the morphological finiteness of the three verbal forms based on epistemicity and information structure. We will explore this issue in detail in Section 3.1.

In terms of syntax, Sibe has three forms that can be marked as indicatives. Of the three forms, participles (simple forms) are defined as forms that can occur in the predicates of adnominal clauses, yet they can also occur in the predicates of nominal clauses and main clauses. Also, verbal nouns (*ŋe*-forms) are defined as forms that can occur in the predicates of nominal clauses, but they can also occur in the predicates of main clauses. The issue then is how to define these forms including finite verbs (*i*-forms) in terms of syntax.

This issue would then lead to yet another issue: how the syntactic features were acquired such that participles can occur in main clauses and nominal clauses in addition to adnominal clauses, and such that verbal nouns can occur in main clauses in addition to nominal clauses. Of course there could have been some opportunities for participles and verbal nouns to have acquired the feature of being able to occur in main clauses, for example, as the result of a syntactic change like insubordination, however, in the present paper, it will be argued that the syntactic characteristics of participles are not the result of any syntactic change, but

rather are features that were originally possessed by participles, and that finite verbs and verbal nouns, in contrast, have lost the feature of being able to occur in adnominal and nominal clauses as a result of syntactic change (finitization).

In Sibe, the finiteness of each verbal form, or of the clauses in which these verbal forms occur, seems to be most linked to the functions of the verbal forms or clauses, that is, the characteristics of the clauses in terms of their morphology and syntax can be accounted for by their functional features. Here the key issue in discussing the function of the clauses in Sibe is that, although the main clauses have acquired the function of carrying information, this seems to be a feature that was acquired through the process of finitization. That is, in Sibe, the original finite clauses had no such function of carrying information, and information structure in Sibe then developed through the re-finitization of the original finite clauses. The finitization process involved the attachment of the clitics =*ŋe* and =*i*, and the clauses lost the ability to occur in adnominal or nominal clauses, due to the functional constraints that adnominal clauses cannot carry any kind of information and that nominal clauses cannot carry new information.

Finiteness is also related to prosody in Sibe. Sibe has three kinds of prosodic patterns or intonation patterns with clauses as their domain. The prosodic patterns have just begun to be considered discussed in the literature, and their relation to the syntax is still not clear. The present paper sheds light on the relations between the function and prosody in the different kind of clauses, and attempts to show that prosodic patterns can be counted among the features of finiteness in Sibe.

Thus, the present paper will show that aspects of the finiteness of clauses are related to one another, and in particular that the finiteness of the clauses can be determined by the function of the clauses. The present paper will show that in Sibe, participles (simple forms) were originally the only forms that could occur in the predicates of the main clauses, and thus participles seems to have been finite forms in that period. After that, *i*-forms and *ŋe*-forms developed on the basis of simple forms. In present-day Sibe, *i*-forms have typical finite features such as syntactic monofunctionality, and *ŋe*-forms also have characteristics similar to those of *i*-forms. The development of *i*-forms and *ŋe*-forms can be viewed as a re-finitization, because *i*-forms and *ŋe*-forms have developed on the basis of simple forms, which were originally the only finite verbal forms. As a result of the development of *i*-forms and *ŋe*-forms, simple forms have become nonfinite because in present-day Sibe, simple forms do not share any characteristics with *i*-forms, which seem to be the finite verbs. The development of the *i*-forms and *ŋe*-forms can also be viewed as the development of information structure, because in present-day Sibe, *i*-forms and *ŋe*-forms have the function of delivering information in the conversation, but simple forms do not have this function.

### 3. Characteristics of the three indicative forms

This section examines the characteristics of the three forms of indicatives, which are hereafter called *i*-forms, *ηe*-forms, and simple forms, and the respective clauses in which the three forms occur in the predicates.

#### 3.1. Morphology

##### 3.1.1. Verbal morphology in Sibe

First, I will examine the characteristics of the three forms of verbs in terms of their morphology. In Sibe, there are three verbal forms, which may all occur in the predicate of the main clause of a declarative sentence. In the present paper, I refer to all of them as indicatives. Table 1 gives the paradigm of the indicatives in Sibe. In the table, forms at the top of each cell are affirmative forms and those at the bottom of each cell are negative forms.

Table 1 Paradigm of indicatives

		<i>i</i> -forms	<i>ηe</i> -forms	simple forms
Realis	Perfective	<i>V-Xe=i</i> <i>V-Xaqu=i</i>	<i>V-Xe=ηe</i> <i>V-Xaqu=ηe</i>	<i>V-Xe</i> <i>V-Xaqu</i>
	Imperfective	<i>V-maxe=i</i> <i>V-maxaqu=i</i>	<i>V-maxe=ηe</i> <i>V-maxaqu=ηe</i>	<i>V-maxe</i> <i>V-maxaqu</i>
Irrealis		<i>V-mi</i> <sup>2</sup> <i>V-qu=i</i>	<i>V-re=ηe</i> <i>V-qu=ηe</i>	<i>V-re</i> <i>V-qu</i>

As will be explained in the next section, of these three forms, *i*-forms can only occur in main clauses, but *ηe*-forms can occur in nominal clauses in addition to main clauses. Furthermore, simple forms can occur in adnominal clauses in addition to nominal and main clauses. If we focus on the syntactic characteristics of the forms that can occur in the adnominal clauses and nominal clauses, then simple forms can be seen as participles, *ηe*-forms as verbal nouns, and *i*-forms as finite verbs. As seen in Table 1, indicatives take suffixes for aspect and mood. Although these suffixes do not mark the temporal position of events, the suffixes mark the reality (realis/irrealis) of the events at the time of speech. So, I will regard the suffixes as TAM markers in the literature. The following sections will mainly focus on the three forms of realis-perfectives (*V-Xe=i*, *V-Xe=ηe*, and *V-Xe*.)

In addition to indicatives, Sibe also has optatives (optative mood) and converbs. The relevant Sibe verbal paradigm is presented in Figure 1. The present paper will discuss the

<sup>2</sup> This form is thought to have originated from *V-re=i*, just like other *i*-forms. See Kogura (2015) for details on its historical development.

finiteness of indicatives and converbs. We will focus on the finiteness of indicatives in the present section, and that of converbs in the fource section.

Indicatives		
Stem	Aspect/Mood, Polarity	Modal clitics
<i>V-</i>	<i>-re / =qu</i> <i>-Xe / -Xaqu</i> <i>-maɣe / -maɣaqu</i>	<i>=i (new)</i> <i>=ɲe (old/given)</i>
Optatives		
Stem	Suffix	
<i>V-</i>	<i>-ki (optative)</i> <i>-kini (jussive)</i>	
Converbs		
Stem	suffix	
<i>V-</i>	<i>-me (simultaneous)</i> <i>-maqe (successive1)</i> <i>-fe' (successive2)</i> <i>-ci (conditional)</i>	

Fig. 1 Verbal morphology in Sibe

### 3.1.2. Morphological identity of the participles and verbal nouns

Before discussing morphological finiteness in Sibe, it is necessary to review the morphophonological analyses of verbal forms proposed in previous literature. The literature on Sibe has proposed different morphological analyses of the forms of indicatives presented above.

According to Li et al. (1984, 1986), Sibe has three kinds of verbal forms corresponding to the indicatives presented in the present paper: adjective-verbal forms (*xingdong xingshi* in Li et al. 1984, 1986), verb-nominal forms (*dongming xingshi*, *ibid.*), and predicative forms (*chenshu xingshi*, *ibid.*). According to Li et al. (1984, 1986), adjective-verbal only occur in the predicates of adnominal clauses, nominal-verbal forms only occur in the predicates of nominal clauses, and predicative forms only occur in the predicates of main

clauses.<sup>3</sup> The forms are given in (1). The forms in parentheses are assumed to exist, based on their description in previous literature. The forms divided by slashes are thought to be allomorphs of the same morpheme. The forms divided by tilde is thought to stand for the different phonetic representation of the an allomorph.

- (1) Three kinds of verbal forms presented in Li et al. (1986)
- a. Adjective-verbal forms (xingdong xingshi)
    - Past:  $-x/-\chi/-k$
    - Imperfective:  $-r\sim-r\dot{\alpha}$
    - Progressive:  $-ma\chi$
  - b. Verb-nominal forms (dongming xingshi)
    - Past:  $-x\dot{\alpha}\eta/-\chi\dot{\alpha}\eta/(-k\dot{\alpha}\eta)/(-xu\eta)/(-\chi u\eta)/(-ku\eta)$ ,
    - Imperfective:  $-r\dot{\alpha}\eta$
    - Progressive:  $(-ma\chi\dot{\alpha}\eta)$
  - c. Predicative forms (chenshu xingshi)
    - Past:  $-x\dot{\alpha}/-\chi\dot{\alpha}/(-k\dot{\alpha})/-xu/-\chi u/(-ku)$ ,
    - $-x\dot{\alpha}\eta/-\chi\dot{\alpha}\eta/(-k\dot{\alpha}\eta)/-xu\eta/-\chi u\eta/(-ku\eta)$ ,
    - $-x\dot{\alpha}i/-\chi\dot{\alpha}i/(-k\dot{\alpha}i)/-xui/-\chi ui/(-kui)$
    - Present-future:  $-m$
    - Present (imperfective):  $-ma\chi\dot{\alpha}$ ,  $-ma\chi\dot{\alpha}\eta$ ,  $-ma\chi\dot{\alpha}i$

From the classification shown above, it seems that Li et al. (1984, 1986) view some adjective-verbal forms ( $-x/-\chi/-k$  and  $-ma\chi$ ) and some predicative forms ( $-x\dot{\alpha}/-\chi\dot{\alpha}/-xu/-\chi u$ , and  $-ma\chi\dot{\alpha}$ ) as different forms, and that they view verb-nominal ( $-x\dot{\alpha}\eta/-\chi\dot{\alpha}\eta$  and  $-ma\chi\dot{\alpha}\eta$ ) and some Chenshu Xingshi ( $-x\dot{\alpha}\eta/-\chi\dot{\alpha}\eta$  and  $-ma\chi\dot{\alpha}\eta$ ) as different forms. However, considering the phonological alternation in Sibe, these forms should be taken to be the different phonetic representations of the same forms:  $-Xe$  ( $-xe/-\chi e/-ke/-xu/-\chi u/-ku$ ) and  $-ma\chi e$ , and  $-Xe\eta e$  ( $-x\dot{\alpha}\eta e/-\chi\dot{\alpha}\eta e/-k\dot{\alpha}\eta e/-xu\eta e/-\chi u\eta e/-ku\eta e$ ) and  $-ma\chi\eta e$ , respectively. In the present paper, all the former forms are labeled as simple forms (participles), and the latter forms are labeled as  $\eta e$ -forms (verbal nouns). Here we will see the phonological alternation in detail.

In Sibe, as we can see in (2), the vowels /e, i, u/ in word-final position lose their phonetical value as vowels unless they receive marked word stress or intonation (Mid-intonation).

<sup>3</sup> It is also possible that Li et al. (1984, 1986) may have been describing the verbal forms that can occur in each kind of clause, but they do not mention that some predicative forms (chenshu xingshi) are the same as verb-nominal forms (dongming xingshi) or adjective-verbal forms (xingdong xingshi). Thus, it seems that Li et al. (1984, 1986) regard each of the three series of verbs as different from one another.

- (2) a. *nane*  
       [nan]  
       “Person”
- b. *taci*  
       [taʃ]  
       “Study, (imperative)”
- c. *lawdu*  
       [laʊtʷ]  
       “Many, much”

Words that have marked stress on the final vowels are presented in (3). In these words, the final vowels are always present and observable.

- (3) a. *age'*  
       elder.brother  
       [agɜː]  
       “Elder brother”
- b. *uci'*  
       door  
       [utʃiː]  
       “Door”
- c. *muku'*  
       water  
       [mukuː]  
       “Water”

The following (4) shows that the word-final vowels in (2) can be observed when these words (stems) receive marked prosody (Mid-intonation, which will be discussed in Section 3.3).

- (4) a. *taci* →.  
       study.IMP [M]  
       [taʃiːeː]  
       “Please study.”
- b. *ai nane* →.  
       what person [M]  
       [nanɜː]  
       “Who is it (What person is it)?”

- c. *erai lawdu* →.  
 this+what much [M]  
 [lavduː]  
 “How much it is!”

The following (5) shows that the word-final vowels in (2a, b) can also be observed when these words (stems) are followed by suffixes or clitics.

- (5) a. *taci-mi*.  
 study-IRR.NINF  
 [taʃim]  
 “(I/you/he/she) study(ies).”  
 b. *nane=we χula-ki*.  
 [nanɜf]  
 person=ACC call-OPT.1  
 “I’ll call a person.”

However, this phonetic alternation only occurs in the final position of clauses or phrases, not in other positions. Thus, as we can see in (6) and (7), such vowels in the predicate of adnominal clauses, and in adjectives that modify nouns, are never observable.

- (6) *cekse’ yawe-Xe nane*  
 [jafχ]  
 yesterday leave-PFV person  
 “The man who left yesterday”  
 (7) *lawdu nane*  
 [lavtʷ]  
 many person  
 “Many people”

Considering this phonological alternation, it seems more plausible to view the adjective-verbal forms *-x/-χ/-k* and *-maχ* and the predicative forms *-xə/-χə/-xu/-χu* and *-maχə* as different phonetic realizations of the same forms *-Xe* and *-maχe*, respectively. In the same way, the adjective-verbal forms and predicative forms *-xəŋel/-χəŋel/-kəŋel/-xuŋel/-χuŋel/-kuŋe* and *-maχəŋ* should be viewed as the same forms as *-Xeŋe* and *-maχeŋe*, respectively.

This analysis has identified an important characteristic of these verbal forms, that is, the forms that occur in the predicates of adnominal clauses (adjective-verbal forms in Li et al. 1984, 1986) can also occur in nominal and main clauses, and another type of form

(nominal-verbal forms in Li et al. 1984, 1986) can also occur in main clauses.<sup>4</sup> Zhang (2008) and Zikmundová (2013) also take this stance, that is, that some types of verbal forms can occur in several kinds of clauses.

### 3.1.3. Person agreement

As mentioned in Section 2, person agreement is an important feature for the discussion of morphological finiteness. Zhang (2008) and Jang and Payne (2012) argue that Sibe has person agreement which is marked on the verbs in main clauses. That is, the *ŋe*-form occurs in accordance with first- and second-person subjects, and the *i*-form with third-person subjects. However, this description does not seem plausible. As we can see in the sentences in (8), both *ŋe*-forms and *i*-forms are accepted for the subjects of all persons and numbers, if appropriate situations are provided. Also, simple forms are accepted in the same conditions.

- (8) a. [bi /si /tere /mese /bo /so /tese] ji-Xe=i.  
 [1SG /2SG /3SG /1PL.INCL/1PL.EXCL/2PL /3PL ] come-PFV=NINF
- b. [bi /si /tere /mese /bo /so /tese] ji-Xe=ŋe.  
 [1SG /2SG /3SG /1PL.INCL/1PL.EXCL/2PL /3PL ] come-PFV=OINF
- c. [bi /si /tere /mese /bo /so /tese] ji-Xe.  
 [1SG /2SG /3SG /1PL.INCL/1PL.EXCL/2PL /3PL ] come-PFV

Thus, none of the three forms agrees with the subjects of any specific person or number, and thus Sibe doesn't have person marking, at least for these forms.

### 3.1.4. TAM and polarity

Tense, mood, and polarity have also been dealt with in the literature on morphological finiteness. According to Kogura (2010, 2018b), The TAM system of Sibe consists of the opposition of mood (realis/irrealis), and aspect (perfective/imperfective), which is attested only in realis mood. As seen in Figure 1, all three indicative forms morphologically contain the components of tense, mood, and polarity. Thus, the three forms are equivalent in these categories in terms of morphological finiteness.<sup>5</sup>

<sup>4</sup> Furthermore, Zhang (2008) and Jang and Payne (2012) argue that Sibe has infinitives *-m* which occur in front of other verbs. These forms should also be viewed as a phonetic realization of *-me* converb.

<sup>5</sup> Li et al. (1984, 1986) argues that the three forms in main clauses denote different tense values, that is, the events denoted by *-Xeŋe* are more temporally remote than those denoted by *-Xe*i** and *-Xe*. If this is the case, then the difference between *-Xeŋe* and the other forms may be related to tense. However, as Kogura (2018a) argues, this temporal remoteness is not an intrinsic quality of the form, but is caused by the epistemic nature of *-Xeŋe*. That is, *-Xeŋe* denotes the mental process of the activation of knowledge that has been stored in an inactive state in the memory of the speaker, and it takes a certain amount of time for such knowledge to become inactive after being registered. The temporal remoteness reflects this time, and thus *ŋe*-forms may just be used to denote such events. Thus, regardless of the argument of Li et al. (1984, 1986), the three forms still have the same value in terms of the TAM system.

### 3.1.5. Modal clitics

The literature has discussed the functions of the three forms when they occur in the predicates of main clauses. As for these suffixes, although previous literature such as Li et al. (1984, 1986) or Zhang (2012) did not divide them into the same TAM suffix and other elements, it seems more plausible to divide them in this way. One of the reasons seems to be that the *i*-form of the irrealis mood suffix *-mi* cannot be divided into *-re* and *=i*. However, according to Kogura (2015), although *-mi* synchronically cannot be divided, historically it originated from *\*-raN* and *\*-bi*. Thus, the analysis dividing them into the same TAM suffix and the other elements *i* or *ŋe* has sufficient basis. As for the elements *i* and *ŋe*, they also seem to be suffixes, but they can follow the negators *waqe* and *aqu* in addition to verbs, as in *waqei* and *aqui*; thus, it seems more plausible to see them as clitics, *=i* and *=ŋe*.

As for the simple forms, there is another possibility that there is another zero-form suffix or clitic which follows the TAM suffix, as with *i*-forms and *ŋe*-forms. However, as Kogura (2013a, b, 2018b) argued, and as will be shown in the following, the characteristics of the three indicative forms, in particular their syntax and function, can be analyzed by assuming that simple forms don't take modal clitics, whereas the two other forms do. Thus, in Sibe, morphological finiteness can be differentiated by the presence or absence of the modal clitics. The modal clitics *=i* and *=ŋe* cannot co-occur with each other, so it is not necessary to consider the finiteness of forms containing two modal clitics.

### 3.2. Syntax

Section 3.1 demonstrated that some of the forms which have been seen as different forms in the literature are in fact phonologically the same form. Based on the analysis proposed in the previous section, we identified the characteristics of the participle (simple forms) and the verbal noun (*ŋe*-forms) in Sibe. That is, the adnominal forms (simple forms) can also occur in the predicates of nominal clauses and in of main clauses, like in (9) and (10), in addition to adnominal clauses, like in (11).<sup>6</sup>

- (9) *sejeN ji-Xe.*  
 car come-PFV  
 "The car has come."

- (10) *miN age' tere=i xexe gya-Xe=we kenxuNje-maxe=i.*  
 1SG.GEN elder.brother 3SG=GEN wife get-PFV=ACC doubt-IMPV=NIN  
 "My brother doubts that he got married."

<sup>6</sup> Hereafter I will describe the characteristics of the three forms based on their perfective forms (*-Xe*, *-Xeŋe*, *-Xe*i**). However, the same applies to imperfective forms (*-maxe*, *-maxeŋe*, *-maxe*i**) and irrealis forms (*-re*, *-reŋe*, *-mi*). See Kogura (2018a, b) for details.

- (11) *tewaqeN ji-Xe nane da miN taci=si.*  
 just.before come-PFV person FOC 1SG.GEN study=ACT  
 “The person that has just come is my student.”

Nominal forms (*ŋe*-forms) can also occur in main clauses like in (12), in addition to nominal clauses, like in (13). However, nominal forms cannot occur in adnominal clauses, like in (14).

- (12) *bi jaquN bya=de bei#jiŋe=de gene-Xe=ŋe.*  
 1SG eight month=DAT Beijing=DAT go-PFV=OINF  
 “I went to Beijing in August.”

- (13) *tere miN siNjyaŋe=de gene-Xe=ŋe=we dyoNji-Xaqu=i.*  
 3SG 1SG.GEN Xinjiang=DAT go-PFV=OINF=ACC hear-PFV.NEG=NINF  
 “He has not heard that I went to Xinjiang.”

- (14) \**tewaqeN ji-Xe=ŋe nane da miN taci=si.*  
 just.before come-PFV= OINF person FOC 1SG.GEN study=ACT  
 “The person that has just come is my student.”

Finite forms (*i*-forms) can only occur in main clauses, like in (15). However, they cannot occur in nominal or adnominal clauses, like in (16) and (17).

- (15) *bi Gulja=de siwe' gisuN taci-Xe=i.*  
 1SG Gulja=DAT Sibe language learn-PFV=NINF  
 “I learned Sibe in Gulja.”

- (16) \**tere miN siNjyaŋe=de gene-Xe=i=we dyoNji-Xaqu=i.*  
 3SG 1SG.GEN Xinjiang=DAT go-PFV=NINF=ACC hear-PFV.NEG=NINF  
 “He has not heard that I went to Xinjiang.”

- (17) \**tewaqeN ji-Xe=i nane da miN taci=si.*  
 just.before come-PFV=NINF person FOC 1SG.GEN study=ACT  
 “The person that has just come is my student.”

Note that although the subjects of adnominal clauses and nominal clauses which are headed by the simple form (*V-Xe*) and *ŋe*-form (*V-Xe=ŋe*) occur in genitive case, subjects of main clauses cannot occur in genitive case. Thus, the case of the subject in each kind of

clause is not determined by the verb form in the predicate, but is determined by where the clause occurs in the whole syntactic construction of the sentence.

The phonological analysis proposed in Section 3.1.2 and the syntactic characteristics of the verb forms verbals proposed in this section would also be supported by the fact that the characteristics of the forms don't conflict with those of other Tungusic languages, and the supposed historical development of Tungusic languages. According to Robbeets (2009, 2013, 2016, 2017), Tungusic languages originally had *\*-rA* in present tense and *\*-sA* in past tense, which correspond to *-re* and *-Xe* in Sibe. In addition, *\*-rA* and *\*-sA* seem to have been able to occur in adnominal, nominal, and main clauses, thus syntactically corresponding to *-re* and *-Xe* (simple forms). I will return to this issue in Section 4.

### 3.3. Prosody

The prosodic pattern of the clauses varies not only according to the type of clause, but also, for the main clauses, according to which form occurs in the predicate. As is argued in Kubo (2011) and Kubo et al. (2011), Sibe has three prosodic patterns which take the clause as their domain. Kubo (2011) and Kubo et al. (2011) call these patterns Falling intonation, Mid-intonation, and Rising intonation. In addition, Kogura (2013a, b, 2018b) argues that there is a correspondence to some extent between the forms of the verbs in the predicate and the prosodic pattern they take.

First, for declarative sentences, as illustrated by the sentences in (18), main clauses in which *i*-forms and *ŋe*-forms occur in the predicate take Falling intonation in general, but can also take Mid-intonation as a marked pattern. In contrast, main clauses in which simple forms occur in the predicate take Mid-intonation in general, but can also take Falling intonation as a marked pattern. In addition, neither of the clauses can take Rising intonation.

- (18) a. *sejeN ji-Xe=i.*                    [↓ /?→ /\*↑]  
       car    come-PFV=NINF    [F / M / R]  
       “The car has come.”
- b. *sejeN ji-Xe=ŋe.*                    [↓ /?→ /\*↑]  
       car    come-PFV=OINF    [F / M / R]  
       “The car has come.”
- c. *sejeN ji-Xe.*                        [??↓ /→ /\*↑]  
       car    come-PFV                [ F /M / R ]  
       “The car has come.”

However, the same is not true of interrogative sentences. As illustrated by the sentences in (19), WH-interrogative sentences take Mid-intonation and cannot take Falling or Rising

intonation regardless of which form occurs in the predicate. WH-interrogative sentences cannot take Rising intonation either.

- (19) a. *sejeN ayteŋe ji-Xe=i.* [??↓ /→ /\*↑]  
 car when come-PFV=NINF [ F /M /R]  
 “When did the car come?”
- b. *sejeN ayteŋe ji-Xe=ŋe.* [??↓ /→ /\*↑]  
 car when come-PFV=OINF [ F /M /R]  
 “When did the car come?”
- c. *sejeN ayteŋe ji-Xe.* [??↓ /→ /\*↑]  
 car when come-PFV [ F /M /R]  
 “When did the car come?”

YN-interrogative sentences in general take Mid-intonation or Rising intonation, but it isn’t natural for them to take Falling intonation. Rising intonation occurs when the speaker clearly requires information from the hearer, in contrast Mid-intonation occurs when the speaker is not clearly requiring information from the hearer, for example in a situation where the speaker is showing admiration after learning a fact.

- (20) a. *sejeN ji-Xe=i na.* [??↓ /→ /↑]  
 car come-PFV=NINF Q [ F /M /R]  
 “Did the car come?”
- b. *sejeN ji-Xe=ŋe na.* [??↓ /→ /↑]  
 car come-PFV=OINF Q [ F /M /R]  
 “Did the car come?”
- c. *sejeN ji-Xe na.* [??↓ /→ /↑]  
 car come-PFV Q [ F /M /R]  
 “Did the car come?”

Kogura (2018b) proposed an explanation for the correspondence between the segmental types of the clauses and the prosodic patterns they take based on the functions of the three verbal forms. This is described in the next section.

### 3.4. Function

Kogura (2013a, b, 2018b) analyzes the functions of the three forms (*i*-forms, *ŋe*-forms, and simple forms) when they occur in the predicates of main clauses. The main claim is that, in affirmative sentences, *i*-forms and *ŋe*-forms have the function of delivering information, but simple forms don’t have such a function. The utterances in (21) and in

(22B) are produced in situations where the speaker has to deliver some new information to the hearer. In this sentence, the *i*-form and *ŋe*-form are accepted, but the simple form is not.

- (21) *oi sejeN [ʃji-me o-Xe /ji-me o-Xe=i].*  
 INTJ car [ come-CVB AUX-PFV /come-CVB AUX-PFV=NINF]  
*χoduduN ju.*  
 quickly come.IMP  
 “Come on quickly! The bus has come!”

- (22) (A asks her son (B) whether he finished homework.)  
 A: *zo#ye are-me waje-Xe=i na.*  
 homework do-CVB finish-PFV=NINF Q  
 “Did you finish your homework?”  
 B: *[??waje-Xe /waje-Xe=i].*  
 [ finish-PFV /finish-PFV=NINF]  
 “Finished.”

In contrast, the simple form is accepted and is even more natural than the *i*-form and *ŋe*-form in sentences that are produced in situations in which the speaker is not delivering new information, typically in exclamatory sentences, like in (23).

- (23) *waje-Xe.*  
 finish-PFV  
 “Finished! (At last I finished my homework.)”

In some cases, simple forms are also possible in utterances produced as a reply to a question posed by the hearer. Even in such cases, simple forms are used when the speaker would like to express their impression beyond just replying to the hearer’s question. In (24), the speaker B is expressing their impression after having had an impressive dinner.

- (24) (A and B had dinner together. A asks B whether B had eaten well and had gotten full.)  
 A: *syaN je-ke=i na.*  
 good eat-PFV=NINF Q  
 “Have you eaten well?”  
 B: *syaN [?je-ke /je-ke=i].*  
 good [ eat-PFV /eat-PFV=NINF ]  
 “I had so much!”

The difference in the functions of the three forms can also be observed in complement clauses. *i*-forms are preferred to simple forms in the complement clauses of verbs with meanings related to delivering information (*ale*- “to tell”, etc.). In contrast, in the complement clauses of verbs that do not have a meaning related to delivering information (*faNce*- “to get angry”, *soŋu*- “to weep”, etc.), simple forms are preferred to *i*-forms, like in (25).

- (25) a. *tere jixɑ bu=qu da [#yawe-Xe /yawe-Xe=i]*  
 3SG money give=IRR.NEG FOC [ leave-PFV / leave-PFV=NINF]  
*seme ale-Xe=i.*  
 COMP tell-PFV=NINF  
 “(He) told (me), ‘That guy has left without giving money (That guy stole the stuff).’”
- b. *tere jixɑ bu=qu da [yawe-Xe /?yawe-Xe=i]*  
 3SG money give=IRR.NEG FOC [ leave-PFV / leave-PFV=NINF]  
*seme faNce-maxe=i.*  
 COMP be.angry-IMPFV=NINF  
 “(He) is angry, saying ‘That guy has left without giving money (That guy stole the stuff).’”

*ŋe*-forms share the same function of delivering information as *i*-forms. This is attested by the fact that *ŋe*-forms are also accepted when the speaker is replying to the hearer’s question. The following sentences in (26) and (27) are examples: *ŋe*-forms are regarded as natural in these sentences, but simple forms would not be.

- (26) A: *eneŋe laŋe#eweN gya-Xe=i na.*  
 today naan (a kind of bread) get-PFV=NINF Q  
 “Have you got naan today?”  
 B: *[ gya-Xe=ŋe /??gya-Xe ].*  
 [ get-PFV=OINF / get-PFV ]  
 “I have got it.”
- (27) A: *si xuiŋe gisuN taci-Xe=i na.*  
 2SG Uighur language study-PFV=NINF Q  
 “Have you studied the Uighur language?”  
 B: *[ taci-Xe=ŋe /??taci-Xe ].*  
 [ study-PFV=OINF / study-PFV ]  
 “(I) studied.”

Thus, both *i*-forms and *ŋe*-forms are accepted in sentences that are produced to deliver information. Here the two forms are distinguished by the kinds of information they deliver: *i*-forms deliver new information, which has been specifically requested by the hearer, and which is asserted by the utterance, and *ŋe*-forms deliver old or given information, which the speaker frames as the background information necessary for the hearer to make an inference to obtain the (new) information that the hearer needs. In the following sentence, in (28), speakers A and B are of the same family, and both A and B have naan (a kind of bread) for breakfast every day. Thus, it is inferable for both the speaker (B) and the hearer (A), that it is necessary for either A or B to get naan for the next day's breakfast. In addition, at the same time, it is also inferable that either A or B will not have to get naan if the other has already gotten it. Thus, in (28), A is asking B whether B has gotten naan in order to know whether A will need to get naan or not. In this case, the information that the speaker needs is whether A will have to get naan or not, and the information provided by B through the replying utterance is indirect, so that A must infer the information that A would like to know based on the information provided by B. In this type of sentence, *i*-forms are not accepted because the information delivered by the sentence is not the specific information that A needs. In contrast, *ŋe*-forms are accepted because the information is such that it allows for an inference to be made by A.

- (28) (A and B is passing by a naan stand)  
 A: *eneŋe laŋe#eweN gya-mi na.*  
 today naan get-IRR.NINF Q  
 “Shall we get naan today?”  
 B: [*#gya-Xe=i / gya-Xe=ŋe*].  
 [ get-PFV=NINF / get-PFV=OINF ]  
 “(I have already) gotten (one).”

In contrast, *ŋe*-forms are not accepted in sentences which deliver the specific (new) information that the hearer requests. In (29), speaker A would like to confirm that speaker B got (didn't leave behind) his/her their mobile phone, and speaker B provides this information in the replying utterance.

- (29) A: *šeu#ji daile-Xe=i na.*  
 mobile.phone take-PFV=NINF Q  
 “Did you take the mobile phone? (Didn't you forget the mobile phone?)”  
 B: [*daile-Xe=i / #daile-Xe=ŋe*].  
 [ take-PFV=NINF / take-PFV=OINF ]  
 “(I) got it.”

In interrogative sentences, *i*-forms and *ŋe*-forms have the function of requesting information from the hearer, but simple forms do not. In (30), which is the utterance of speaker A in (29) repeated here, the speaker is clearly requiring information from the hearer. In this utterance, simple forms are not accepted but *i*-forms are accepted.

- (30)    *šeu#ji*                    [ #*daile-Xe* / *daile-Xe=i* ]    *na*.  
 mobile.phone            [ take-PFV / take-PFV=NINF ]    Q  
 “Did you take the mobile phone? (Didn’t you forget the mobile phone?)”

However, in (31), the speaker is only expressing his/her impression to the hearer and not requiring any information from the hearer. In this utterance, simple forms are accepted, but *i*-forms are not.

- (31)    (The speaker became pleased after hearing that the hearer had gotten married at last.)  
*araN xexe*            [ *baχe-Xe* / #*baχe-Xe=i* ]    *na*.  
 at.last wife            [ get-PFV / get-PFV=NINF ]    Q  
 “Finally did you get married? (You finally got married.)”

Thus, (30) and (31) demonstrate that *i*-forms have the function of the speaker requiring information of the hearer, but simple forms do not.

In conversation, *ŋe*-forms also share the same function as *i*-forms of requesting information. In this case, an utterance of a sentence in which a *ŋe*-form occurs in the predicate functions to request the background (or indirect) information which allows the hearer to infer (or confirm) the (new) information which the speaker (of the interrogative) needs, whereas an utterance in which an *i*-form occurs functions to request the (new) information which the speaker (of the interrogative) needs. Thus, in (32), which is repeated here from (30), the speaker is requesting the information which he/she would like to acquire, *i*-forms are allowed in this sentence, but *ŋe*-forms are not.

- (32)    *šeu#ji*                    [ *daile-Xe=i* / #*daile-Xe=ŋe* ]    *na*.  
 mobile.phone            [ take-PFV=NINF / take-PFV=OINF ]    Q  
 “Did you take the mobile phone? (Didn’t you forget the mobile phone?)”

However, in (33), the speaker needs to confirm that they know the reason the hearer is wearing a ring, having inferred that the hearer has gotten married, and so requests the information to confirm this inference. In this case, the (direct) information that the speaker of the interrogative needs is why the hearer is wearing a ring, and the information that the

speaker is requesting is only background, or indirect information for inferring that information. In this sentence, *ηe*-forms are allowed and regarded as natural. *i*-forms are also allowed in this sentence, but not be regarded as natural.

- (33) (The speaker saw that the hearer was wearing a ring, and inferred that the hearer had gotten married)

*oi si xexe [ baxe-Xe=ηe / ?baxe-Xe=i ] na.*

INTJ 2SG wife [ get-PFV=OINF / get-PFV=NINF ] Q

“Have you gotten married?”

### 3.5. Brief summary: Finiteness as a bundle of morphology, syntax, prosody, and function

This section has explored the characteristics of the three verbal forms of indicative mood (*i*-forms, *ηe*-forms, and simple forms) and the clauses in which these forms occur in the predicates. The characteristics of these three forms are summarized as follows.

1. Morphology: None of the three forms takes person agreement markings. In addition, all of these three forms can mark negation and tense/aspect in the same way. Thus, these three forms cannot be distinguished in terms of the morphological finiteness defined in Nikolaeva (2007b) and other literature. However, since *i*-forms and *ηe*-forms take modal clitics which denote the delivery of information, and simple forms do not, *i*-forms and *ηe*-forms can be morphologically distinguished from simple forms in terms of the presence (or absence) of these clitics.

2. Syntax: *i*-forms can only occur in main clauses, but the other two forms can occur in other kind of clauses in addition to main clauses. Thus, *i*-forms can be distinguished in terms of finiteness on the basis that *i*-forms are syntactically monofunctional while the other forms are syntactically multifunctional in Malchukov’s (2013) terms.

3. Prosody: In affirmative sentences, simple forms take a different kind of prosodic pattern (Mid-intonation) from the other two forms, which take Falling intonation as their default pattern.

4. Function: The modal clitics that *i*-forms and *ηe*-forms take denote the delivery of information, and the clauses in which these clitics occur in the predicate have the illocutionary force of accepting the information from of the hearer. In contrast, simple forms have no such clitics, and thus do not have any illocutionary force related to the acceptance of information. Thus they do not carry information in conversation.

Kogura (2013a, b, 2018b) identified these characteristics of these three kinds of indicative forms, and argued that the morphological, syntactic, and prosodic characteristics of these forms all came from the function of the three forms (in particular the function of

modal clitics). First, the modal clitics denote the mental management of the information exchanged through conversation and of the knowledge stored in the interlocutors' memory. This mental management denoted by the modal clitics has the illocutionary force of requiring the hearer to process the information in the way marked by the modal clitics, when clauses including these modal clitics are uttered in conversation. And this corresponds to the function of asserting new or given information. In contrast, simple forms have no such clitics, and thus simple forms do not have any functions related to the mental management of information or knowledge; hence simple forms do not have the function of assertion.

As for the syntactic characteristics of the three forms, Kogura (2013a, b, 2018b) argues that they can be sufficiently accounted for by assuming a minimal unit of information for processing: the mental process of reference can only be applied to the syntactic units of a nominal phrase or clause, therefore, *ηe*-forms, which have a function of reference, cannot occur in adnominal clauses that are embedded in nominal phrases or clauses. Moreover, the mental process of registration can only take the whole (main) clause as its unit. Therefore, neither *i*-forms nor *ηe*-forms can occur in adnominal clauses, and further *i*-forms cannot occur in nominal clauses.

Furthermore, Kogura (2013a, b, 2018b) argues that the prosodic characteristics of the three forms are also sufficiently accounted for by assuming the presence of illocutionary force combined with the mental processing. In conversation, the semantics of mental processing are combined with the illocutionary force of the clause. Here, modal clitics =*i* and =*ηe* are markers of the mental processing of registering information into the memory and recalling information from the memory, respectively. These meanings of processing of information are combined with the illocutionary force that requires the hearer to process the information in a way designated by the modal clitics. In contrast, simple forms do not involve any mental processing, and thus cannot be combined with any illocutionary force toward the hearer to process the information.

This can explain why simple forms take a different prosodic pattern from *i*-forms or *ηe*-forms. That is, those forms which are combined with an illocutionary force and which have the function of assertion (*i*-forms and *ηe*-forms) take Falling intonation, and those forms which are not combined with any illocutionary force and do not have the function of assertion (simple forms) take Mid-intonation. In some cases, a speaker may want to avoid the illocutionary force which is expressed by utterances that contain *i*-forms and *ηe*-forms, that is, the speaker would not want to make the utterance too assertive. In this case the clauses in which *i*-forms and *ηe*-forms occur in the predicate can also take Mid-intonation in addition to Falling intonation. However, simple forms cannot be combined with Falling intonation, because simple forms inherently do not designate the mental processing of information and thus cannot be assertive.

As for interrogative sentences, it is argued in Kogura (2013a, b, 2018b) that since interrogative sentence forms just denote that the speaker is not sure about the semantic content of the uttered sentence, such forms cannot have the same illocutionary force of requiring the hearer to process the information, or in other words cannot be assertive. Thus, interrogative sentences take the same prosodic pattern as simple forms in affirmative sentences.

As a result, the characteristics of the three indicative forms can be viewed as characteristics that are motivated by the functions of the three verbal forms. The issue, then, is how this should be understood in terms of finiteness.

#### 4. The finiteness of the three indicative forms

##### 4.1. The gradable nature of finiteness with respect to the three indicative forms

The previous section examined the characteristics of the three indicative forms, as well as the types of clauses in which these three forms occur in the predicate. If the finiteness of these clauses were determined based on the studies discussed in Section 2, it would be plausible to view *i*-forms, or the clauses in which *i*-forms occur in the predicate, as finite, based on the syntactic monofunctionality suggested in the literature (Nikolaeva 2007b, 2010; Malchukov 2013). Furthermore, if *i*-forms, or the clauses in which *i*-forms occur in the predicate, are viewed as finite, based on their syntactic monofunctionality as proposed by Malchukov (2013), then it seems that the other characteristics of *i*-forms, in terms of morphology, prosody, and function, are also those of finite verbal forms or finite clauses. This is shown in Table 2.

Table 2 The characteristics of finite and non-finite clauses in Sibe

	Non-finite forms or clauses	Finite forms or clauses ( <i>i</i> -form)
Morphology	Does not take modal clitics	Takes modal clitics
Syntax	Multifunctional	Monofunctional
Prosody	Mid-intonation	Falling intonation
Function	Does not deliver information	Delivers information

Table 2 suggests that, in Sibe, the concept of finiteness is not only related to morphology and syntax, but also to prosody and function, and that finiteness must be viewed as a bundle of morphological, syntactic, prosodic, and functional features. As discussed in Section 3.5, of these features, the syntactic and prosodic features seem to be motivated by the functions of the modal particles, and these features together constitute the features of the finite forms.

If so, then simple forms, or those clauses in which simple forms occur in the predicate, can be viewed as non-finite based on the fact that simple forms do not have any characteristics in common with *i*-forms, as shown in Table 3.

Table 3 Features of the three indicative forms related to finiteness

	simple forms	<i>ŋe</i> -forms	<i>i</i> -forms
Syntax: Can occur only in the main clause or not (monofunctionality)	—	—	○
Morphology: Takes modal clitics or not	—	○	○
Prosody: Takes falling intonation as the default prosodic pattern or not	—	○	○
Function: Delivers information or not	—	○	○

(“○” indicates that the form has the feature, and “—” indicates that it does not.)

However, there are two main issues with this argument. The first is how the finiteness of *ŋe*-forms should be viewed. It seems plausible that finiteness could be viewed as a gradable notion, at least in Sibe. In this case, it would be necessary to identify the characteristics of *ŋe*-forms in terms of the four features and to properly place *ŋe*-forms within the finiteness framework. Second, although *i*-forms seem to have more of the features of finite forms and clauses, this does not necessarily mean that clauses with the opposite features are non-finite. There could be another possibility which is that those clauses are also essentially finite, and the other clauses are *more* finite. In the following, I will continue the discussion of the finiteness of *ŋe*-forms and simple forms, and will argue that, in Sibe, simple forms should also be viewed as finite, and the other two forms as more finite than simple forms, as the other two forms developed through the re-finitization of the former finite clauses.

#### 4.2. The finite nature of simple forms: Comparison with converbs

This section explores the finiteness of simple forms by comparing indicative forms to *-fe'*, *-maqe*, *-ci'*, and *-me* converbs, and shows that simple forms should be viewed as more finite than converbs.

A *-fe'* converb denotes the temporal relationship of two clauses. It denotes that the situation expressed by the main clause occurs after the situation expressed by the dependent clause headed by the converb. The two situations connected by a *-fe'* converb are supposed to occur independently of each other, thus *-fe'* converbs only just focus on the temporal relationship of the two events, like in (34). The dependent clause headed by a *-fe'* converb can take a subject independently of the main clause, like in (35).

- (34) *bi erde' nene-me jaqe je-fe' cabcal=de gene-Xe=i.*  
 1SG morning advance-CVB thing eat-CVB Cabcal=DAT go-PFV=NINF  
 "In the morning, I went to Cabcal after having breakfast."
- (35) *miN xaχeji tacyqu=deri' meda-me ji-fe' bi gene-ki.*  
 1SG.GEN son school=ABL come back-CVB come-CVB 1SG go-OPT.1  
 "I will go after my son comes back from school."

A *-maqe* converb also denotes the temporal relationship of two situations that occur successively, but unlike *-fe'* converbs, it denotes that the two situations are not independent of each other, thus in some cases *-maqe* converbs may denote a causal relationship between the two situations. The dependent clause headed by a *-maqe* converb can also take a subject independently of the main clause, like in (36).

- (36) *cekse' miN gucu bo=de ji-maqe, bi bo=deri'*  
 yesterday 1SG friend house=DAT come-CVB 1SG house=ABL  
*cici-me mutu-Xaqu=i.*  
 go.out-CVB can-PFV.NEG=NINF  
 "Because my friends came to our home, I couldn't go out of my house."

A *-ci'* converb denotes a conditional relationship between two situations. Like *-maqe* converbs, *-ci'* converbs denote that the situations expressed by the two clauses are not independent of each other, but as opposed to *-maqe* converbs, the two situations denoted by a *-ci'* converb are in general not realized at the time of speech. The dependent clause headed by a *-ci'* converb can also take a subject independently of the main clause, like in (37).

- (37) *cimare tere jaqe ji-ci' bi aliN=de gene=qu.*  
 tomorrow that thing come-CVB 1SG mountain=DAT go=IRR.NEG  
 "Tomorrow I won't go to the mountain if that guy comes."

As shown in (38), a *-me* converb denotes the simultaneity of the situations expressed by two clauses. It denotes that the two situations are dependent on each other, and in some cases it conveys the purpose of the action expressed by the main verb, as shown in (39). As shown in (40), dependent clauses headed by *-me* converbs cannot take different subjects from that of main clauses. Hence, the subject of the two clauses is understood to be the same.

- (38) *miN* *χaxεji* *bitke'* *ta-me,* *jaqe* *je-mi.*  
 1SG.GEN son book see-CVB thing eat-IRR.NINF  
 “My son read books while having a meal.”
- (39) *tere* *jaqe* *yeli* *bira=we* *ta-me* *gene-Xe=i.*  
 3SG thing Yili river=ACC see-CVB go-PFV=NINF  
 “He went to see the Yili river.”
- (40) \**miN* *χaxεji* *bitke'=we* *ta-me,* *bi* *jaqe* *are-Xe=i.*  
 1SG son book=ACC look-CVB 1SG thing make-PFV=NINF  
 “I prepared a meal while my son was reading a book.”

The following sentences, in (41) to (43), show that converbs cannot mark negation morphologically. *-me* and *-fe'* converbs cannot take a morpheme that marks negation, and in this case an indicative simple form, *=qu*, denotes the absent of the situation which occurs simultaneously to the situation denoted by the main clause, as shown in (41). The sentences in (42) and (43) show that *-maqe* and *-ci'* converbs cannot take negation by themselves, and the negation is taken by another auxiliary, *o-*.

- (41) *tere* *jaqe* *jaqe* *je=qu* *yawe-Xe=i.*  
 that thing thing eat=IRR.NEG leave-PFV=NINF  
 “He/She left not having taken meal.”
- (42) *cekse'* *sejeN* *ji-Xaqu* *o-maqe* *bi* *tacyqu=de*  
 yesterday car come-PFV.NEG AUX-CVB 1SG school=DAT  
*sita-Xe=i.*  
 be.late-PFV=NINF  
 “I was late for school yesterday because the bus didn't come.”
- (43) *cimare* *tere* *jaqe* *gene=qu* *o-ci'* *bi* *gele* *gene=qu.*  
 tomorrow that thing go=IRR.NEG AUX-COND 1SG also go=IRR.NEG  
 “I won't go either if he/she doesn't go tomorrow.”

Thus, morphologically, converbs lack categories like aspect, mood, and polarity which are present in indicatives. And syntactically, some converbs are not finite in the sense that dependent clauses headed by converbs cannot take a subject independently of the main

clause. In addition, converbs cannot occur independently and cannot behave like main clauses,<sup>7</sup> as in the following (44).

- (44) A: *eneŋe si nene-me caŋcale=de gene-mi na,*  
 today 2SG precede-CVB Cabcal=DAT go-IRR.NINF Q  
*nene-me jaqe je-mi na.*  
 precede-CVB thing eat-IRR.NINF Q  
 “Today will you go to Cabcal first or have a meal in advance?”
- a. B: *nene-me jaqe je-mi.*  
 precede-CVB thing eat-IRR.NINF  
 “I will have a meal in advance.”
- b. B: *nene-me jaqe je-fe’ gene-mi.*  
 precede-CVB thing eat-CVB go-IRR.NINF  
 “I will go after having a meal.”
- c. B: *\*nene-me jaqe je-fe’.*  
 precede-CVB thing eat-CVB  
 “Having a meal in advance.”

As for the prosodic features of clauses headed by converbs, all the converbs in general take Rising intonation. In addition to Rising intonation, they can take Mid-intonation, but none of them can take Falling intonation. With respect to their function, they seem not to deliver information independently in the conversation, because they cannot be used independently as an answer to the hearer’s question.

Thus, the characteristics of converbs compared to indicatives can be summarized as Table 4.

Table 4 Features of converbs and indicatives

	Converbs	Indicatives
Morphology	Cannot take aspect/mood/polarity	Takes tense/polarity
Syntax	Cannot occur independently	Occurs independently
Prosody	Takes Rising intonation	Cannot take Rising intonation
Function	Cannot deliver information	Delivers information

<sup>7</sup> Insubordinated conditional clauses with *V-ci* converbs have been attested; these have occurred independently as a sentence in written Manchu (Tsumagari 2000), and some speakers of Sibe also accept such sentences. However, at least some speakers do not accept this use of a *V-ci* converb. And this differs from simple forms, which are generally accepted by speakers.

As illustrated in Table 4, converbs lack all characteristics that are shared by all of the indicatives. This can serve a basis to view all three indicatives, including *ŋe*-forms and simple forms, as finite, and to view converbs as non-finite.

#### 4.3. The historical development of *ŋe*-forms and *i*-forms

Section 4.2 identified the characteristics of converbs, and proposed that all three indicatives, including *ŋe*-forms and simple forms, should be viewed as finite, and converbs as non-finite. This section considers the finiteness of the three indicative forms focusing on their historical development. As a result, it will be shown that *ŋe*-forms and *i*-forms are developed from simple forms.

##### 4.3.1. The historical development of *ŋe*-forms

Historically, *ŋe*-forms may have come from a nominal clause which consisted of the functional noun *ngge* (which corresponds to *ŋe* in Sibe) as its head, and an adnominal clause modifying the head noun. The functional noun *ngge* attaches to verbs and some nominal elements, and refers to the given referents anaphorically. The sentences in (45) and (46) are examples from the archives of the Qing dynasty, in the 17<sup>th</sup> century. In (45), *ngge* is attached to a nominal element, *ememu* “some”, and the whole word *ememungge*<sup>8</sup> “some ones” refers to *hūlha* “burglar(s)”, which has already been mentioned in the first line of the sentence.

- (45) *ememu hūlha akdun be etu-fi, dacun be sefere-fi*  
 some burglar solid ACC wear-CVB sharp ACC grab-CVB  
*tuleri hokila-fi jugūn baha-fi hafuna-rakū; ememu-ngge*  
 outside gang-CVB street possible-CVB go.through-IRR.NEG some-FN  
*beye be gūwaliya-mbu-fi, cira be ice-fi, boo de*  
 body ACC change-CAUS-CVB face ACC dye-CVB house DAT  
*gida-me dosi-fi duri-mbi;*  
 press-CVB enter-CVB rob-IRR.NINF  
 “Some burglars are ganging up outside wearing solid things and grabbing sharp things, and people cannot pass through them. Others (other burglars) break into houses, having disguised themselves and dyed their faces.”

And in (46), the same functional noun, *ngge*, is attached to a verbal form, *wasimbuha* “hand down”, and the whole word *wasimbuhangge*, “what (the Regent Prince) handed down”, refers to the contents of the document which the writer had previously sent to the government. In this case the contents has been referred to in the previous sentences.

<sup>8</sup> The transcription of written Manchu in the present paper is based on Möllendorf (1892), but the vowel *i* which is written separately but in dependent form is transcribed as *-i* in this paper. The vowel is transcribed as *i* in Möllendorf (1892). In addition, “^^” represents the indent, and “;” and “;” represent the punctuation in the original text.

- (46) *juwan nadan de wasimbu-ha bithe=i gisun;*  
 ten seven DAT hand.down-PAST document=GEN word  
 ^^*daicing gurun -i han -i fon=de,*  
 Daiqing empire GEN Khan GEN behalf=DAT  
*doro be aliha wang, dorolon -i jurgan de*  
 doctorin ACC take-PAST prince rite GEN ministry DAT  
*wasimbu-ha-ngge;*  
 hand.down-PAST-FN  
 “The words of the document handed down on the 17th: what Regent Prince  
 handed down to the Ministry of Rite on behalf of the Khan of Qing dynasty is ...”

As mentioned in Section 3.4, *ŋe*-forms deliver information that the speaker already has at the time of the utterance. This function of *ŋe*-forms seems to have come from the function of *ngge* that refers to given referents anaphorically. That is, just like the functional noun *ngge* in written Manchu, *ŋe*-forms in modern Sibe can be said to refer to knowledge which is already in the memory of the speaker and activate that knowledge.

#### 4.3.2. The historical development of *i*-forms

Just as with *ŋe*-forms, *i*-forms also seem to have developed from simple forms. Kogura (2015) argues that *i*-forms in Sibe, especially the realis perfective *V-Xei* and irrealis *V-mi*<sup>9</sup>, have developed from indicatives (*V-Xe* and *V-re*, respectively) through the addition of the element *bi*. This element *bi* is assumed by Kogura (2015) to be a marker of first-person singular subject, but in Zakharov (1879), it is assumed to be a copula.<sup>10</sup> In any case, the *i*-forms have developed from simple forms through the addition of another element.

### 4.4. Discussion

#### 4.4.1. Finiteness of simple forms and historical development of indicatives

First, this section considers the finiteness of simple forms. As shown in 4.1, of the three indicatives, simple forms cannot be seen as finite in the sense that simple forms lack some characteristics of *i*-forms, which are seen as typical finite verbs. However, this does not necessarily entail that simple forms are not finite verbs. In fact, there is a good basis for viewing even simple forms as finite. There are at least two reasons. The first is that there are some other forms that seem to be less finite than simple forms. And the second is that

<sup>9</sup> As the realis imperfective forms (*V-mahe=i*, *V-mahe*, *V-mahe=ŋe*) do not have corresponding forms in historical Manchu, it is not possible to discuss the historical development of realis imperfective forms in the same way as with realis perfective and irrealis forms.

<sup>10</sup> Zakharov (1879) argues that the irrealis *i*-form in written Manchu developed through the combination of the converb *V-me* + copula *bi*. However, this analysis is problematic because there is another *V-me* + *bi* construction which is not combined in written Manchu.

*i*-forms and *ŋe*-forms seem to have developed from simple forms, which seem to have been the only finite forms in the language originally. Based on these points, it seems plausible that simple forms were historically finite, and that they became less finite as a result of the development of *i*-forms and *ŋe*-forms out of simple forms.

Another reason for viewing simple forms as finite forms is that this analysis is compatible with the historical development of other Tungusic languages. In other Tungusic languages other than Sibe and Manchu, there are two series of verbal forms *\*-ra* and *\*-ri* in non-past tense, and the latter seems to have come from a non-finite form through insubordination (Robbeets 2009, 2013, 2016, 2017; Malchukov 2013). However, in Sibe, none of the three indicatives examined in the present paper correspond to *\*-ri*, and simple forms in Sibe correspond to *\*-ra*, which is considered to be a finite verb in other Tungusic languages.

Based on this analysis, it seems that there was only one indicative form in the earliest stage of Tungusic languages, and Sibe (including written Manchu) then developed other forms, as described in Section 4.3, while other Tungusic languages developed other non-finite forms through the insubordination of other nominal forms.

#### 4.4.2. Historical development of *ŋe*-forms and *i*-forms: A re-finitization?

If we assume the historical development of *ŋe*-forms and *i*-forms (Section 4.3), it can be said that both *ŋe*-forms and *i*-forms developed from finite verbs. Moreover, as mentioned in Section 4.1, since the *ŋe*-forms and *i*-forms have more finite characteristics than simple forms, the process of producing *ŋe*-forms and *i*-forms out of simple forms can be seen as re-finitization, a process which produces (more) finite forms out of forms which are already finite. Furthermore, as discussed in Section 3.4, *ŋe*-forms and *i*-forms have a function related to delivering information in conversation in contrast to simple forms, which do not. Therefore, the process of re-finitization can actually be understood as the forms' development of the function of delivering information in conversation, in other words, as the language's development of a system of delivering information in conversation.

#### 4.4.3. The development of *ŋe*-forms as a re-nominalization

The development of *ŋe*-forms out of simple forms is also interesting in terms of nominalization as well as finitization. As discussed in Section 3, both *ŋe*-forms and simple forms can be seen as nominal, in the sense that they can directly take nominal case markings. Therefore, based on the fact that *ŋe*-forms have nominal characteristics, the process of *ŋe*-forms developing out of simple forms be viewed as a type of nominalization. However, in this case the process cannot be seen as a type of derivation because the source form is also nominal. Here the process of so-called re-nominalization seems to involve a change in function. That is, as a result of the process, simple forms acquire the function of being able

to refer to given referents. Thus, the process of (re-)nominalization is specifically the acquisition of the reference function.

## 5. Conclusion

The present paper has investigated the finiteness of the three forms of indicatives (*i*-forms, *ŋe*-forms, and simple forms) in Sibe. There are two main points in the analysis of the present paper. The first is that, in Sibe, finiteness is seen as a bundle of morphological, syntactic, prosodic, and functional features, and of these four features, the syntactic and prosodic features can be accounted for by regarding them as secondary features that are motivated by the functions that are denoted by the morphological markings. Second, considering the historical development of the three forms, *ŋe*-forms and simple forms which are seen as non-finite in the theoretical literature should instead be viewed as finite, and *ŋe*-form and *i*-forms should be understood as having developed through the re-finitization of simple forms. The re-finitization is in functional terms the acquisition of a system of delivering information in conversation.

The development of indicatives is important in typological terms. Kazama (2012) and Yamakoshi (2017) suggest that the difference between finite verbs and other nominal forms, such as participles and verbal nouns, is related to evidentiality or modality. In the case of Sibe, the difference between the three forms specifically relates to the function of delivering information in conversation. Yamakoshi (2017) also proposes a typology of the development of indicatives, and suggests that there are three types of processes: i) verbalization, ii) re-nominalization, and iii) insubordination. It seems that Yamakoshi (2017) would suggest that each language develops indicatives through one of these three processes. However, it seems that Sibe has developed indicatives through two processes: verbalization and re-nominalization. The case of Sibe may lead to a re-examination of the typology of indicatives and their development.

\* This paper is a product of the ILCAA joint research project “Typological Study on “Altaic-type” Languages.”

## Abbreviations

ABL	ablative	AUX	auxiliary
ACC	accusative	CAUS	causative
ACT	actor	COMP	complementizer

COND	conditional	OINF	old (given) information
CVB	converb	OPT	optative
DAT	dative	PAST	past
EXCL	exclusive	PFV	perfective
FN	functional noun	PL	plural
FOC	focus	Q	question
GEN	genitive	SG	singular
IMP	imperative	1	first person
IMPFV	imperfective	2	second person
INCL	inclusive	3	third person
INTJ	interjection	[F]	falling intonation
IRR	irrealis	[M]	mid-intonation
NEG	negation	[R]	rising intonation
NINF	new information		

## References

- Cuyckens, Hubert and Martine Robbeets (eds.). 2013. *Shared Grammaticalization: With Special Focus on the Transeurasian Languages*. Amsterdam: John Benjamins Publishing Company.
- Evans, Nicholas. 2007. “Insubordination and its uses”. In Irina Nikolaeva (ed.) *Finiteness: Theoretical and Empirical Foundations*. New York: Oxford University Press. pp.366–431.
- Evans, Nicholas and Honoré Watanabe (eds.). 2016a. *Insubordination*. Amsterdam: John Benjamins Publishing Company.
- Evans, Nicholas and Honoré Watanabe. 2016b. “The dynamics of insubordination: An overview”. In Nicholas Evans and Honoré Watanabe (eds.) *Insubordination*. Amsterdam: John Benjamins Publishing Company. pp.1–39.
- Givón, Talmy. 2001. *Syntax: A Functional-typological Introduction*. Amsterdam: John Benjamins Publishing Company.
- . 2016. “Nominalization and Re-Finitization”. In Claudine Chamoreau and Zarina Estrada-Fernández (eds.) *Finiteness and Nominalization*. Amsterdam: John Benjamins Publishing Company. pp.271–296.
- Lambrecht, Knud. 1994. *Information Structure and Sentence Form*. Cambridge: Cambridge University Press.
- Li, Shulan, Zhongqian and Qingfeng Wang. 1984. *Xiboyu kouyu yanjiu*. Beijing: Minzu Chubanshe. [in Chinese]
- Li, Shulan and Zhongqian. 1986. *Xiboyu jianzhi*. Beijing: Minzu Chubanshe. [in Chinese]
- Kazama, Shinjiro. 2012. “Verbals and insubordination in Altaic-type languages”. *Northern Language Studies* 2. pp.139–162. (in Japanese)
- Kogura, Norikazu. 2010. “On the three verbal suffixes *-mi*, *-Xei*, *-mahei* in Sibe Manchu: Aspect and the structure of temporal deixis”. *Tokyo University Linguistic Papers* 30. pp.93–113. [in Japanese]
- . 2013a. “The function of three perfective forms *-Xei*, *-Xeje*, *-Xe* and a clause hierarchy: Why only *-Xe* may occur in adnominal clauses?”. *Hoppō gengo kenkyū* 3. pp.155–174. [in Japanese]

- . 2013b. “Shibego no Asupekuto, Modariti no Kenkyu: Chishiki Jotai no Henka ni Motodzuku Taikeika”. Ph.D. dissertation, the University of Tokyo. [in Japanese]
- . 2015. “On the form and function of verbal suffix *-mi (-mbi)* in Sibe: Is it a vestige of subject agreement?”. In Proceedings of the 12th Seoul International Altaic Conference. The Altaic Society of Korea. pp.23–34.
- . 2018a. “Irrealis in terms of knowledge management: The case of Sibe”. Tokyo University Linguistic Papers 38. pp.161–182. [in Japanese]
- . 2018b. *Shibego no modariti no kenkyu* [A study on the modality system in Sibe]. Tokyo: Bensei Publishing. [in Japanese]
- Kubo, Tomoyuki. 2011. “Sibe intonation”. In Proceedings of the 10th Seoul International Altaic Conference. The Altaic Society of Korea. pp.89–98.
- Kubo, Tomoyuki, Norikazu Kogura, and Syōsei. 2011. *Shibego no Kiso*. Fuchu: ILCAA. [in Japanese]
- Jang, Taeho and Thomas Payne. 2012. “Dependency and clause combining in Xibe”. In Andrej L. Malchukov and Lindsay J. Whaley (eds.) *Recent Advances in Tungusic Linguistics*. Wiesbaden: Harrassowitz Verlag. pp.229–256.
- Malchukov, L. Andrej. 2004. *Nominalization, Verbalization: Constraining a Typology of Transcategorial Operations*. München: Lincom Europa.
- . 2006. “Constraining nominalization: Function/form competition”. *Linguistics* 44(5). pp.973–1009.
- . 2013. “Verbalization and insubordination in Siberian languages”. In Hubert Cuyckens and Martine Robbeets (eds.) *Shared Grammaticalization: With Special Focus on the Transeurasian Languages*. Amsterdam: John Benjamins Publishing Company. pp.177–208.
- Nikolaeva, Irina (ed.). 2007a. *Finiteness: Theoretical and Empirical Foundations*. Oxford: Oxford University Press.
- . 2007b. “Introduction”. In Nikolaeva (ed.) *Finiteness: Theoretical and Empirical Foundations*. Oxford: Oxford University Press. pp.1–19.
- . 2010. “Typology of finiteness”. *Linguistics and Language Compass* 4(12). pp.1176–1189.
- Robbeets, Martine. 2009. “Insubordination in Altaic”. *Journal of Philology* 31. pp.61–79.
- . 2013. “Genealogically motivated grammaticalization”. In Hubert Cuyckens and Martine Robbeets (eds.) *Shared Grammaticalization: With Special Focus on the Transeurasian Languages*. Amsterdam: John Benjamins Publishing Company. pp.147–176.
- . 2016. “Insubordination and the establishment of genealogical relationship across Eurasia”. In Nicholas Evans and Honoré Watanabe (eds.) *Insubordination*. Amsterdam: John Benjamins Publishing Company. pp.209–246.
- . 2017. “The development of finiteness in the Transeurasian languages”. *Linguistics* 55(3). pp.489–523.
- Tsumagari, Toshiro. 2000. “The Manchu sentence-final converb in *-ci* with reference to the origin of *-cina*”. *Altai Hakpo* 10. pp. 139–150. [in Japanese]
- von Möllendorff, P. Georg. 1892. *A Manchu Grammar*. Shanghai: American Presbyterian Mission Press.
- Yamakoshi, Yasuhiro. 2017. “Two future expressions in Shinekhen Buryat: Three typological models of the verbalization of participles”. *Journal of the Center for Northern Humanities* 10. pp.79–96. [in Japanese]
- Zakharov, I. Ivan. 1879. *Grammatika man'chzhurskogo jazyka*. St. Petersburg: Akademija Nauka. [in Russian]
- Zhang, Taihao (Jang, Taeho). 2008. *Xiboyu yufa yanjiu*. Kunming: Yunnan Minzu Chubanshe. [in Chinese]
- Zikmundová, Veronika. 2013. *Spoken Sibe: Morphology of the Inflected Parts of Speech*. Prague: Carolinum Press.