

# Verbal suffix *-du* in Udihe\*

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The verbal suffix *-du* takes a flexible position in verbal predicate structures according to the given verb form (i.e., finite/participle). There has been disagreement regarding the grammatical function of the suffix *-du* that precedes the finite verb forms in previous work. Nikolaeva and Tolskaya (2001) claim that *-du* is used to mark the third person plural subject. Kazama (2007a, 2008a), on the other hand, rebuts this claim since the position of *-du* is apparently different from the position of other person markers. Rather, Kazama claims that *-du* should be defined as a verbal derivational suffix, which is closely associated with plurality and direct evidentiality. Furthermore, no specific study has been made on the suffix *-du* that follows the participle verb forms. Thus, this paper has reexamined the grammatical function of the verbal suffix *-du*, both in the finite and participle verbs, with reference to textual materials and elicitation data in Udihe. We conclude that the verbal suffix *-du*, in the finite verb, optionally serves as the third person plural marker, since Udihe lost the Tungusic nominal plural suffix *-l* (which can indicate the third person plural in most Tungusic languages) in the process of phonetic change. The verbal suffix *-du* in the participle verb (present and past tense only) is used in the third person plural, expressing direct evidentiality. The use of the verbal suffix *-du* in the participle may be another realization of the finite tense form since they have evidentiality and syntactic function in common.

**Keywords:** verbal suffix *-du*, Udihe, finite, participle, third person plural marker, evidentiality

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## 0. Introduction<sup>1)</sup>

The aim of this paper is to reexamine the grammatical function of the verbal suffix *-du* in the finite and participle verbs by referring to the Udihe text and elicitation data. The paper consists of five parts as follows: Section 1 introduces verb forms (finite/participle) in Udihe. Section 2 examines previous studies on the verbal suffix *-du*. Section 3 covers the verbal suffix *-du* that precedes the tense/mood marker (finite verb). In Section 4, we examine the suffix *-du* that follows participle verb forms. Finally, Section 5 provides a summary of the main points in the paper.

The verbal suffix *-du* in Udihe takes flexible morphological loci by being positioned either before or after the tense/mood marker, depending on the verb forms (finite or participle), as presented below in Examples (1-1) and (1-2).

### V-*du*-FINIT

- (1-1) *anana njaula-ŋiga jeu gusi-du-ŋe-ø?*  
 a long time ago child-PL what play-DU<sup>2)</sup>-FUT-3PL  
 “A long time ago, what could children play for fun?”

(Kazama 2004: 470)

### V-PTCP-*du*

- (1-2) *nede-e-du gune-ø.*  
 put-PTCP.PST-DU say-PRS  
 “They said: (They) put (something) down.”

(Kazama 2010a: 239)

The position flexibility of the verbal suffix *-du* is an unusual phenomenon, considering the relatively fixed morphological order in Udihe verbal predicate structure, as given in Figure 1.

1) Udihe is one of the Tungusic languages spoken in the southern province of Far Eastern Russia near the Chinese border. The study mainly focuses on the Bikin dialect of Udihe. Transcription in this paper is based on Kazama (2010a: 195-196) with a minor change as follows: [vowels: *a, i, u, e (=ə), o*, consonants: *p, t, č, k, b, d, ʃ, g, m, n, ŋ, f, s, x, l, w, j*]. Gloss and English translation are my own and sometimes differ from the original text.

2) ‘DU’ denotes the verbal suffix *-du* in this paper.

**Verb stem** — voice-aspect — **tense/mood** — person/number<sup>3)</sup>  
primary stem stem-forming affix  
 secondary stem

**Figure 1.** Verbal predicate structure in Udihe (Note. Bold-faced = obligatory element) (Girfanova 2002: 25).

## 1. Verb forms in Udihe

In Section 1, we briefly cover verb forms in Udihe. In this paper, Udihe verb forms are divided into two types: (1) finite verb [PRS: V- $\emptyset$ -PERS, PST: V-A<sup>4)</sup>-PERS, FUT: V- $\check{y}$ A-PERS, SUBJ: V-*muse*-PERS, OPT: V-*tA*-PERS =  $\check{y}$ A], (2) participle verb [PRS: V-*i*-PERS, PST: V-A-PERS, FUT: V- $\check{y}$ A $\eta$ A-PERS]. The distinction between finite and participle verbs can be made based on syntactic and evidential functions. The finite verb only serves as a sentence predicate, while the participle, also termed “verbal noun” in some literature, has various syntactic functions (nominal, adnominal and predicate). As for evidential distinction, there are four previous studies. Shnejder (1936) claims that the finite past is used to express witnessed event, whereas the participle past functions as hearsay form, for example:

- |  |  |
|--|--|
| <p>a. finite past: direct evidentiality</p> <p><i>nua bu-ge-<math>\emptyset</math>.</i></p> <p>3SG.NOM give-PST-3SG</p> <p>“He gave (for sure).”</p> | <p>b. participle past: hearsay</p> <p><i>nua bu-he-ni.</i></p> <p>3SG.NOM give-PTCP.PST-3SG</p> <p>“He (is said to) have given.”</p> <p style="text-align: right;">(Malchukov 2000: 453)</p> |
|--|--|

Malchukov (2000: 453), however, states that the participle past is neutral in evidentiality, while only the finite past is evidentially-marked since the participle past is used to express both witnessed and non-witnessed cases. Girfanova (2002: 30-31) says that the finite past is used when the speaker either witnessed the events or had confidence in the source of information. Kazama (2010a: 218-219) reports that the finite present and past are used to express experienced or witnessed events in his description of Udihe grammar.

3) Note that the person/number marking is mandatory only in the finite verb, whereas it can be omitted in the participle form.

4) Udihe is a language with vowel harmony. Therefore, *-A-* signifies the representative form, which is assimilated by the final vowel (*a-o-e*) of the verb stem.

In this paper, based on the previous accounts above, evidentiality in verb forms is defined as follows: the finite present and past are used to indicate witnessed events or affirmative meaning, whereas the participle form can express both witnessed and non-witnessed events.<sup>5)</sup>

2. Previous studies

Concerning the grammatical function of the verbal suffix *-du*, there has been disagreement between previous accounts by Nikolaeva and Tolskaya (2001) and Kazama (2003a, 2007a, 2008a). Both studies are mainly focused on the suffix *-du* that precedes the finite verb forms.

2.1 Nikolaeva and Tolskaya (2001): person marker for 3PL

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

Distribution of personal inflections

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 3<sup>rd</sup> 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, *etete-du-ze* ‘let them work’ <work-PL-SUBJ (=FUT)>. Moreover, for class I verbs ending in *-i* or *-u* whose Perfect stem is derived by

5) The author supposes that evidentiality in Udihe exists in the entire finite tense system (past, present and future) of the finite verb.

the element *-ge-*, the 3<sup>rd</sup> Plural inflection *-du-* precedes this element *-ge-*. For example: *umi-du-ge* ‘they have drunk’ <drink-PL-PERF (= PST)>.

(Nikolaeva & Tolskaya 2001: 213)

In addition, they also present the verbal paradigm set out in Table 1 below. Negation in Udihe is created by the negative auxiliary verb *e-*, followed by the tense/mood marker and personal endings in order, while the verb stem remains alone [cf., Figure 2 and Examples (2-1), and (2-2)].

	PFT (= PST)	NEG	COND (= SUBJ)	NEG	SUBJ (= FUT)	NEG
1SG	<i>bu-ge-i</i>	<i>e-s'e-i</i> <i>bu</i>	<i>jexe-muse-i</i>	<i>e-muse-i</i> <i>jexe</i>	<i>jexe-je-mi</i>	<i>ata-mi</i> <i>jexe</i>
2SG	<i>bu-ge-i</i>	<i>e-s'e-i</i> <i>bu</i>	<i>jexe-muse-i</i>	<i>e-muse-i</i> <i>jexe</i>	<i>jexe-je-i</i>	<i>ata-i</i> <i>jexe</i>
3SG	<i>bu-ge</i>	<i>e-s'e</i> <i>bu</i>	<i>jexe-muse</i>	<i>e-muse</i> <i>jexe</i>	<i>jexe-je</i>	<i>ata</i> <i>jexe</i>
1PL.EXC	<i>bu-ge-u</i>	<i>e-s'e-u</i> <i>bu</i>	<i>jexe-muse-u</i>	<i>e-muse-u</i> <i>jexe</i>	<i>jexe-je-u</i>	<i>ata-u</i> <i>jexe</i>
1PL. INCL	<i>bu-ge-ti</i>	<i>e-s'e-ti</i> <i>bu</i>	<i>jexe-muse-ti</i>	<i>e-muse-ti</i> <i>jexe</i>	<i>jexe-je-fi</i>	<i>ata-fi</i> <i>jexe</i>
2PL	<i>bu-ge-u</i>	<i>e-s'e-u</i> <i>bu</i>	<i>jexe-muse-u</i>	<i>e-muse-u</i> <i>jexe</i>	<i>jexe-je-u</i>	<i>ata-u</i> <i>jexe</i>
3PL	<i>bu-du-ge</i>	<i>e-s'e-du</i> <i>bu</i>	<i>jexe-du-muse</i>	<i>e-du-muse</i> <i>jexe</i>	<i>jexe-du-je</i>	<i>ata-du</i> <i>jexe</i>

**Table 1.** Verbal paradigm in Udihe (based on Nikolaeva & Tolskaya 2001: 244-245: *bu-* “give”, *jexe-* “sing”)

<i>e</i> -tense/mood-person/number NEG.AUX	verb stem
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**Figure 2.** Udihe negative structure.

Affirmative sentence

(2-1) *nuani*      *ηene-i-ni.*

(s)he      go-PTCP.PRS-3SG

“(S)he goes.”

Negative sentence

(2-2) <i>nuani</i>	<i>e-i-ni</i>	<i>ŋene.</i>
(s)he	NEG-PTCP.PRS-3SG	go
“(S)he does not go.”		

Table 1 above shows that the verbal suffix *-du* belongs to the negative verb *e-* as other person markers do in the negative sentence. However, we cannot attest such negative construction with the verbal suffix *-du* as shown above [cf., Example (3-1)]. Even in Nikolaeva and Tolskaya (2001), the verbal suffix *-du* in negation is attached to the verb stem, as given in (3-2). Therefore, Table 1, concerning the morphological position of the verbal suffix *-du* in negative construction, is inconsistent with practical usage.

(3-1) <i>bii</i>	<i>site-ne-mi</i>	<i>o-lo</i>	<i>e-se</i>	<i>eme-du?</i>
I	child-ASS.PL-1SG	this-LOC	NEG-PST	come-DU
“Do my children come here?”				
(Kazama 2004: 47)				

(3-2) <i>nuati</i>	<i>emne = de</i>	<i>namun-tigi</i>	<i>e-s’e</i>	<i>xuli-du.</i>
they	once = CLT	sea-DIR	NEG-PST	travel-DU
“They have not traveled to the sea even once.”				
(Nikolaeva & Tolskaya 2001: 214)				

## 2.2 Kazama (2003a, 2007a, 2008a): plural suffix related to direct evidentiality

Kazama (2003a, 2007a, 2008a), on the other hand, describes *-du* as an element used to denote plurality of subject. He does not agree with Nikolaeva and Tolskaya (2001), arguing that its morphological slot does not correspond with that of general person markers, which always stand on the right edge of a verbal predicate structure. He insists that, judging from the position of the verbal suffix *-du* in the negative construction, it should be categorized as a derivational suffix rather than a personal marker. With reference to Examples (3-1), and (3-2) above, the author supports Kazama’s argument that the verbal suffix *-du* should be regarded as a derivational suffix.

At the same time, Kazama (2007a, 2008a) claims that *-du* is strongly related to direct evidentiality since it mainly appears “in quotation(s), rhetorical expression(s), and expressions involving epistemic modality”. Furthermore, Kazama (2010a: 239) briefly mentions the verbal suffix *-du* that appears after participle verb form.

### 2.3. Approach

As stated above, there has been inconsistency in determining the grammatical function of the verbal suffix *-du* that precedes the finite verb form in previous studies. Moreover, no specific study has been carried out on the suffix *-du* that follows the participle. This study, therefore, attempts to specify the grammatical function of the verbal suffix *-du*, both in the finite and participle verbs. The study will be divided into two parts: (1) the first part, called “pre-positioning of verbal suffix *-du*”, considers the suffix *-du* that precedes the finite inflectional suffixes; (2) the second part, hereafter called “post-positioning of verbal suffix *-du*”, deals with the suffix *-du* that takes the rightmost position of predicate structure after participle verb forms.

### 3. Pre-positioning of verbal suffix *-du*

In Section 3, the focus is placed on the verbal suffix *-du* that precedes the finite verb form. The suffix *-du* in the finite verb should be defined as a derivational element since the position of *-du* corresponds with that of general derivational suffixes both in the affirmative and negative sentences, as given in (1-1) and (3-1, 3-2). We reexamine the suffix *-du* from the perspective of person and evidentiality to verify previous studies. We confine the data to the following three points:

- (a) The analysis deals with the verbal suffix *-du* in the finite verb categories as follows [PRS: V-*du*- $\emptyset$ , PST: V-*du*-*ge* (NEG: *e-se* V-*du* “NEG-PST V-DU”), FUT: V-*du*-*ǰA* (NEG: *ata* V-*du* “NEG.FUT V-DU”), SUBJ: V-*du*-*muse*, OPT: V-*du*-*tA* = *ǰA*].
- (b) The following examples are excluded from the analysis because of doubts regarding their grammaticality: *bi-se-du-ge* (be-PST-DU-PST) in Kazama (2006: 144), *ǰawa-gi-ga-du* (take-REPET-PST-DU) in Kazama (2009: 109), *tausi-du-ǰe-ti* (cure-DU-FUT-3PL) in Kazama (2009: 154).
- (c) The example sentences that include other personal endings are also excluded because they do not belong to the finite verb category. These are as follows: *xukte-du-isi-ti* (handle-DU-COND.CONV-3PL) in Kazama (2004: 63); *bagdi-du-a-ti* (live-DU-PTCP.PST-3PL) in Kazama (2004: 379); *bi-du-e-ti* (be-DU-PTCP.PST-3PL) in Kazama (2008b: 145).

3.1 Relation between the verbal suffix *-du* and person

We clarify the relation between the verbal suffix *-du* and person in the finite verb by analyzing Udihe textual materials and elicitation data. We conduct an analysis of Udihe text by dividing it into two groups (Text A and Text B), depending on consultants.

3.1.1. Text

As shown in Tables 2-1 and 2-2 below, the verbal suffix *-du* in the finite verb is proved to be dominant in the third person plural subject. There are two examples of verbal suffix *-du* in the first person plural, as indicated below.

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

**Table 2-1.** Verbal suffix *-du* and person in Text A (Kazama 2004, 2006, 2007b, 2008b, 2009, 2010a)

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

**Table 2-2.** Verbal suffix *-du* and person in Text B (Kanchuga 2002, 2010)

- (4-1) *maala*      *degemune-ni = de*  
dried.fish drying.place-3SG = CLT  
*xaishi*      *xonto-ŋi*      ***woo-du-ø-mu,***      *mute-e.*  
further other-INS make-DU-PRS-1PL.EXC finish-PST  
“We finish making a drying place for dried fish with other material.”  
(Kazama 2008b: 94)
- (4-2) *uta-wa*      ***telugu-du-ø,***      *buu*      *omo.*  
that-ACC narrate-DU-PRS we.EXC one  
“We narrate that, one story.”  
(Kazama 2008b: 169)

However, the author raises doubts regarding the grammaticality of Examples (4-1) and (4-2) above for the following reasons. Having verified Example (4-1) with the attached audio material in Kazama (2008b), the author believes that the transcription should read *woodu mutee*, not *woodumu mute*. In addition, it



is ungrammatical insofar as *woodumu* and *mute* do not agree in person and number, i.e., the subject in *woodumu* is first person plural but *mute* is a third person singular or plural subject. With regard to Example (4-2), given that personal endings for the finite verb cannot be omitted, the personal marker *-u* should be used for the first plural subject: no such element exists in the given sentence. Therefore, the two examples of the verbal suffix *-du* in the first person plural are dubious in their grammaticality.

### 3.1.2. Elicitation

Following an elicitation conducted with my consultant Kanchuga<sup>6)</sup> in 2012, the verbal suffix *-du* is reconfirmed to appear only in the third person plural, and is not used for other persons [cf., (5-1)-(5-3)]. Besides, the suffix *-du*, as given in examples (5-4) and (5-5), is considered an optional element.

(5-1) \**buu*            *uta-wa*            ***diga-du-ge-u.***  
          we.EXC        that-ACC        eat-DU-PST-1PL.EXC  
          “We ate that.”

(5-2) \**minti*        *uta-wa*            ***diga-du-ge-fi (ti).***  
          we.INCL        that-ACC        eat-DU-PST-1PL.INCL  
          “We ate that.”

(5-3) \**suu*            ***gene-du-je-u.***  
          2PL.NOM        go-DU-FUT-2PL  
          “You will go.”

(5-4) *nuati*            ***gene-(du)-je.***  
          they            go-DU-FUT  
          “They will go.”

(5-5) *nuati*            ***gene-(du)-muse.***  
          they            go-DU-SUBJ  
          “They should have gone.”

## 3.2 Relation between the verbal suffix *-du* and evidentiality

Section 3.2 examines the relation between the suffix *-du* and evidentiality.

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6) Note that the Udihe consultant is the author of Kanchuga (2002, 2010). Kanchuga is relatively younger (by about ten years) than the consultants in Kazama’s text. For that reason, his Udihe data may have been influenced by Russian, but the author supposes that the data still retain value as linguistic data.

	Finite				
	PST (V- <i>du-ge</i> )	PRS (V- <i>du-ø</i> )	FUT (V- <i>du-je</i> )	SUBJ (V- <i>du-muse</i> )	OPT (V- <i>du-te=je</i> )
total	28	2	2	2	1

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

Table 3 above illustrates the appearance of the verbal suffix *-du* in Kanchuga (2002, 2010). We can see that the suffix *-du* is used in all finite verb categories. The author, therefore, does not agree with Kazama (2007a, 2008a) that the verbal suffix *-du* is associated with direct evidentiality, since it appears not only in the evidentially-related tense (present and past) system but also in the mood system, such as optative and subjunctive. Judging from the fact that most examples of data for direct evidentiality in Kazama (2007a, 2008a) belong to the finite tense category, which is evidentially-marked, it is natural to say that direct evidentiality is represented by the finite tense form rather than by the verbal suffix *-du*.

**3.3 Verbal suffix *-du* in the finite verb**

Based on the use of the verbal suffix *-du* in Udihe textual materials and elicitation data, it is possible to say that the suffix *-du* is used in the third person plural of finite verbs. Nevertheless, it is premature to reach the conclusion that *-du* marks the third person plural in the finite verb. Therefore, this section considers the grammatical meaning of the suffix *-du* in the finite verb form. Table 4 shows the paradigm of the finite verb in the third person. We can confirm that there is no person marker for the third person in the Udihe finite verb, which signifies that opposition between the third person singular and plural does not exist.

	PRS (-ø-)	PST (-A-)	FUT (-jA-)	OPT (-tA=jA)	SUBJ (-muse-)
3SG	*V-ø-ø →PTCP <sup>7)</sup>	V-A-ø	V-jA-ø	V-tA-ø=jA	V-muse-ø
3PL	*V-ø-ø →PTCP ↓ V- <i>du-ø-ø</i> <sup>8)</sup>	V-A-ø ↓ V-( <i>du</i> )- <i>ge-ø</i> <sup>9)</sup>	V-jA-ø ↓ V-( <i>du</i> )-jA-ø	V-tA-ø=jA ↓ V-( <i>du</i> )-tA-ø=jA	V-muse-ø ↓ V-( <i>du</i> )-muse-ø

**Table 4.** Finite verb in the third person

With the optional use of the verbal suffix *-du*, the third person plural can be marked in the finite verb form. In sum, seeing that the verbal suffix *-du* dominantly appears in the third person plural subject, it should be determined that it optionally marks the third person plural in the finite verb form, even though its position is different from that of general personal endings. Still, the reason why Udihe uses such an unusual method to mark the third person plural with the verbal suffix *-du* in the finite verb remains unresolved. Thus, we examine the third person markers of the finite verb in other Tungusic languages to verify whether similar phenomena exist.

### 3.4 Personal endings in Tungusic languages<sup>10)</sup>

Tables 5 and 6 indicate personal endings for the third person in the verb tense paradigm of the Tungusic languages. The priority in this section will be placed on the third person markers in the finite verb.

#### 3.4.1. Personal endings in the first group of Tungusic

As shown below in Table 5, the first group of Tungusic, except Solon in Chinese territory, marks the third person plural in the finite verb with a distinctive personal ending from the third person singular. Some languages, such as Even and Negidal, use the nominal plural suffix *-l* to mark the third person plural subject in certain finite verb forms.

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- 7) There is no form of the finite present tense in the third person, which is replaced by the participle (cf., Malchukov 2000: 452-453).
  - 8) This form is differently described according to previous studies [Kazama (2007a: 116): finite present, Nikolaeva & Tolskaya (2001: 216): perfect (= finite past in this paper) for verbs which end with *-a/-e/-o*]. The present study follows Kazama (2007a) and defines it as the finite present due to the morphological consistency of the finite verb forms. However, this is contradictory to Footnote 7, which states that Udihe does not have the finite present tense in the third person. Further study would be required to resolve this issue. In addition, the author does not confirm whether the suffix *-du* in the finite present can be omitted. This issue is kept on hold in this paper.
  - 9) Verb stems which end in the vowels *-i*, or *-u* take the allomorph *-ge* of the past tense suffix *-A* in the finite verb. Hence, the finite past with the suffix *-du* is realized as *V-du-ge*. However, without optional use of the suffix *-du*, it remains as *V-A-∅*.
  - 10) The classification of Tungusic in this paper is based on Ikegami [2001b (1974): 395] as follows: I. Evenki (Ek), Even (E), Negidal (N), Solon (S), II. Udihe (U), Orochi (Oc), III. Nanay (Nn), Olcha (Ol), Uilta (Ut), IV. Manchu (M).

	Ek		E		N		S	
	Set2 (FINIT)	Set1 (PTCP)	Set2 (FINIT)	Set1 (PTCP)	Set2 (FINIT)	Set1 (PTCP)	Set2 (FINIT)	Set1 (PTCP)
3SG	-n	-n	-n(i)	-n	-n	-n	-n	-∅
3PL	-∅	-tin	-∅/-r ( < *n+l : ?)	-tan	-∅/-l/ -tin	-tin	-n	-∅

**Table 5.** Personal endings for the third person in the first group of Tungusic [based on Ikegami 2001a (1983: 371-372), Kazama (2003b: 165) and Kazama (2002: 115)]

#### 3.4.2. Person endings in the second/third group of Tungusic

Ikegami [2001a (1983): 369-370] claims that there is no personal ending for the third person in Set 2 (=finite verb in this paper) of Nanay, Olcha, Uilta and Udihe, apart from the plural element *-l* which optionally marks the third person plural subject in Nanay, Olcha and Uilta (cf., Table 6 below). However, the plural suffix *-l* does not exist in Udihe.

	II			III					
	U		Oc	Nn		Ol		Ut	
	Set2 (FINIT)	Set1 (PTCP)	Set1 (PTCP)	Set2 (FINIT)	Set1 (PTCP)	Set2 (FINIT)	Set1 (PTCP)	Set2 (FINIT)	Set1 (PTCP)
3SG	-∅	-ni	-n(i)	-∅	-ni	-∅	-ni	-∅	-ni
3PL	-∅	-ti	-ti	(-l)	-či	(-l)	-ti	(-l)	-či

**Table 6.** Personal endings for third person in the second-third group of Tungusic [based on Ikegami 2001a (1983): 370-371]

#### 3.4.3. Nominal plural suffix *-l* in Tungusic

Figure 3 represents the nominal plural suffix in Tungusic. As stated above, the suffix *-l*, which is used to obligatorily or optionally mark the third person plural in most Tungusic languages, is considered a nominal plural suffix. However, there is no corresponding element in the Tungusic second group (Udihe, Orochi<sup>11)</sup>) or Chinese Tungusic (Solon and Manchu).<sup>12)</sup> It is presumed

11) Orochi does not retain the finite verb that is already replaced by the participle with clear opposition between the third person singular and plural. Therefore, Orochi does not require any element for the third person plural subject.

12) Solon does not have the opposition between third person singular and plural,

E	Ek	S	N	U	Oc	Nn	Ol	Ut	M	Proto Tungusic
-l	-l		-l				-l(i)~- l(i)	-l		*-l

**Figure 3.** Nominal plural suffix in Tungusic<sup>13)</sup> [Ikegami 2001c (1971): 430]

that Udihe lost the element in the process of phonetic change, as with Kazama's (2010a: 193) description that the sonorants *-n*, *-l*, *-r* in the syllable-final declined in Orochi and Udihe.

In summary, most Tungusic languages can indicate the third person plural subject with the nominal plural suffix *-l* in the finite verb. This is not the case in Udihe because it has no such element. The author supposes that this is why the verbal suffix *-du* in Udihe functions as a person marker for the third person plural in the finite verb form.

#### 4. Post-positioning of verbal suffix *-du*

Section 4 deals with the verbal suffix *-du*, which follows the participle verb forms. The suffix *-du* in the participle reveals different morphological status depending on sentence types. The suffix *-du* in the affirmative sentence takes same position with that of general personal markers, as given in Example (6-1). However, *-du* is attached to verbal stem in the negative sentence [cf., Example (6-2)], as is the case with general derivational suffixes. In short, we can say that *-du* in the participle verb displays mixed features of inflectional and derivational elements in the morphological position.

- (6-1) *ilaa see gaja eme-i-du.*  
           three kind bird           come-PTCP.PRS-DU  
           ‘Three kinds of birds come.’

(Kazama 2009: 220)

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with no special marker for the third person plural. There is no person marker in Manchu.

13) The suffix *-l* in the third group (Nanay, Ulcha, Uilta) of Tungusic no longer functions as a nominal plural suffix but serves only as the third person plural marker in the finite verb (cf., Kazama 2010b, 2010c).

(6-2) *ei*      *jeu*      *aana-wa=da*    *e-i*                      ***woo-du.***  
          now    what    boat-ACC=CLT    NEG-PTCP.PRS    make-DU  
          “(They) do not make any boat now.”

(Kazama 2008b: 200)

We examine it from the perspective of person and evidentiality. The analysis covers the verbal suffix *-du* in the participle verb categories as follows (PRS: *V-i-du*, PST: *V-A-du*, FUT: *V-ǵAŋA-du*).

#### 4.1 Relation between verbal suffix *-du* and person

As shown in Table 7, the use of the verbal suffix *-du* in the participle is also confined within the third person plural subject, as it is in the finite verb form.

	1PL.EXC	1PL.INCL	2PL	3PL	total
total percentage				218 100%	218

**Table 7.** Verbal suffix *-du* and person in Text A (based on data from Kazama 2004, 2006, 2007b, 2008b, 2009, 2010a)<sup>14)</sup>

Table 8 shows that the position of the suffix *-du* is the same as that of the third person plural marker *-ti* in the participle form. This means that there are two forms for the third person plural in the participle. What is the difference between the two forms?

	PRS( <i>-i-</i> )	PST( <i>-A-</i> )	FUT( <i>-ǵAŋA-</i> )
3SG	V-i-ni	V-A-ni	V-ǵAŋA-ni
3PL	V-i-ti ↓ (V-i- <i>du</i> )	V-A-ti ↓ (V-A- <i>du</i> )	V-ǵAŋA-ti ↓ (*V-ǵAŋA- <i>du</i> ) <sup>15)</sup>

**Table 8.** Personal endings for the third person in participle verb (based on data from Kazama 2004, 2006, 2007b, 2008b, 2009, 2010a)<sup>15)</sup>

14) As far as Text B (Kanchuga 2002, 2010) is concerned, there is no example of the verbal suffix *-du* in the participle verb.

15) The verbal suffix *-du* in the participle future is not attested in Udihe text.

#### 4.2 Relation between verbal suffix *-du* and evidentiality

In this section, we concentrate on the relation between the suffix *-du* and evidentiality. This may be a key to distinguishing the verbal suffix *-du* from the third person plural marker *-ti*. As mentioned in Section 1, the Udihe participle is expected to express both direct and indirect evidentiality (i.e., evidentially-unmarked), while only the finite verb is evidentially-marked. Therefore, we examine whether the suffix *-du* and the third person marker *-ti*, in the same participle, demonstrate the same evidential feature.

In Udihe, there are two forms of copula verb *bi-* in the past tense: 1) the finite past: *bi-se* (be-PST), which expresses “direct evidential or affirmativeness”; 2) the participle past: *bi-si-(ni)* (be-PTCP.PST-3SG), which is neutral in evidentiality, as given in (7-1) and (7-2).

- (7-1) *nuani*      *alagdiga*      *bi-se.*  
 (s)he      beautiful      be-PST  
 “(S)he was beautiful (for sure).”

- (7-2) *nuani*      *alagdiga*      *bi-si-ni.*  
 (s)he      beautiful      be-PTCP.PST-3SG  
 “(S)he was beautiful.”

Both forms of copula in the past tense can also form periphrastic expressions with complete sentences [cf., (8-1), (8-2)], which are used to express events that happened prior to the reference time, either in the present or in the past. The author supposes that the periphrastic structures also display the distinction of evidentiality in accordance with verb forms of copula, since *bise* is evidentially-marked compared to *bisi(ni)*.

- (8-1) *nuani*      *mindu*      *omoti*      *diana-i*      *bi-se.*  
 (s)he      I.DAT      always      say-PTCP.PRS      be-PST  
 “(S)he has always said to me (for sure).”

(Kanchuga 2010: 153)

- (8-2) *utauxi*      *masina*      *eme-e-ni*      *bi-si-ni.*  
 that.DIR      car      come-PTCP.PST-3SG      be-PTCP.PST-3SG  
 “Car had come there.”

(Kanchuga 2010: 109)

In order to check the relation between the suffix *-du* and evidentiality, this paper examines with which forms of copula (finite and participle past) the





finite past of copula, the verbal suffix *-du* in the participle is presumed to be closely associated with the direct evidential.

#### 4.3. Syntactic function of the participle with the verbal suffix *-du*

In Section 4.2., we have pointed out that the verbal suffix *-du* is strongly related to direct evidentiality. In this Section, we examine syntactic function of the participle with the verbal suffix *-du* and the third person plural marker *-ti* to clarify distinction of the two forms. As mentioned in Section 1, there is a syntactic difference between finite and participle verbs. The finite verb functions only as a predicate, but the participle has multi-syntactic functions, such as nominal, adnominal and predicate. As Table 10 and Example (10-1) represent, the participle verb with the verbal suffix *-du* only serves as a sentence-final form, as does the finite verb. On the other hand, the participle with personal ending *-ti* has the three syntactic functions presented below [(10-2)-(10-4)].

	Participle (V-PTCP- <i>du</i> ) (PRS, PST)	Participle (V-PTCP- <i>ti</i> ) (PRS, PST)
nominal	–	+
adnominal	–	+
predicate	+	+

**Table 10.** Syntactic function of the participle with the verbal suffix *-du* and the third person marker *-ti*

##### Predicate

(10-1) *njaula-ŋiga*      *uta-wa*      *[diga-a-du]*.  
 child-PL      that-ACC      eat-PTCP.PST-DU  
 “Children ate that (for sure).”

(Kazama 2008b: 96)

##### Nominal

(10-2) *saa-i-ti*      *[ile = dee*      *bi-i-we-ti]*.  
 know-PTCP.PRS-3PL      where = CLT      be-PTCP.PRS-ACC-3PL  
 “(They) know where (women) are.”

(Kazama 2004: 115)

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Concerning the suffix *-du* in the finite past, we cannot make a judgment since there is no example of *V-du-ge* (V-DU-PST) that forms periphrastic expressions with copular verb in Udihe text.

## Adnominal

- (10-3) *udie-j̄ge*                      [*lusa-j̄ge*    *bagdi-li-e-ti*]                      *xoto-tigi*  
           Udihe-PL                      Russian-PL    live-INC-PTCP.PST-3PL    town-DIR  
           *omoti*                              *xuli-e-ti*.  
           always                              go.out-PTCP.PST-3PL  
           “Udihe people always went out to the town where Russians had begun  
           to live.”

(Kanchuga 2010: 65)

## Predicate

- (10-4) *jugdi-la-fi*                      [*iigi-e-ti*].  
           house-LOC-REF.PL    arrive-PTCP.PST-3PL  
           “(They) arrived at their house.”

(Kazama 2004: 279)

## 5. Conclusion

This paper has reanalyzed the grammatical function of the verbal suffix *-du* in the finite and participle verbs on the basis of Udihe texts and my elicitation data.

### 5.1 Pre-positioning of verbal suffix *-du* (in the finite verb)

The Udihe verbal suffix *-du* that precedes the tense/mood markers is proved to optionally work as the third person plural marker in the finite verb. This marks an unique function in the Tungusic languages since most Tungusic languages, either obligatorily or optionally, mark the third person plural with the nominal plural suffix *-l*. This unusual phenomenon is presumed to result from the fact that Udihe lost the common Tungusic plural suffix *-l* in the process of phonetic change. With regard to evidentiality, the verbal suffix *-du* is considered to have nothing to do with direct evidentiality since it is also used in other mood systems (optative and subjunctive).

### 5.2 Post-positioning of verbal suffix *-du* (in the participle verb)

The verbal suffix *-du* that follows the tense/mood markers is presumed to serve as an evidential marker for the third person plural in the participle present and past tense. In addition, the participle with the suffix *-du* only functions as a predicate. These two characteristics demonstrate clear differences from the participle verb with the third person marker *-ti*, which is neutral in the evidential and has multi-syntactic functions. Thus, the

participle with the verbal suffix *-du* may be another realization of the finite tense form since they have evidentiality and syntactic function in common.

However, the following issues remain unresolved in this paper. Firstly, further study is required to specify why the verbal suffix *-du*, which is supposed to appear only in the finite verb,<sup>17)</sup> is also used at a different morphological position from general derivational suffixes in the participle verb. Secondly, the suffix *-du* does not represent the direct evidential in the finite verb but serves as an evidential marker in the participle. Such a split in evidentiality, according to verb form, also requires clarification. Thirdly, the distinction between the finite tense form and the participle with the verbal suffix *-du* needs to be clarified, since they have similar syntactic and semantic functions.

### Abbreviations

1, 2, 3: first person, second person, third person	INS: instrumental
ACC: accusative	LOC: locative
ASS: associative	NEG: negative
AUX: auxiliary verb	NOM: nominative
CLT: clitic	OPT: optative
COND: conditional	PERS: personal ending
CONV: converb	PL: plural
DAT: dative	PRS: present
DES: designative	PST: past
DIR: directive	PTCP: participle
DU: verbal suffix <i>-du</i>	REF: reflexive
EXC: exclusive	REPET: repetitive
FINIT: finite	SG: singular
FUT: future	SIM: simultaneous
INC: inchoative	SUBJ: subjunctive
INCL: inclusive	V: verb
	=: clitic boundary

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17) This comment is based on the systematic use of the verbal suffix *-du* in the finite verb form. On the other hand, the suffix *-du* in the participle is restricted to the present and past tense.

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