# Complex Predicates in Tenyidie

A thesis submitted to the University of Hyderabad in partial fulfilment of the requirement for the award of the degree of

DOCTOR OF PHILOSOPHY

IN

APPLIED LINGUISTICS

by
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CENTRE FOR APPLIED LINGUISTICS AND TRANSLATION STUDIES
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KIKROKHOL KRAHO

### **Abbreviations**

1 first person 2 second person 3 third person accusative ACC adjective ADJ adverb(ial) ADV agreement AGR article ART auxiliary AUX benefactive BEN causative CAUS comitative COM complimentizer COMP COMPL completive continuous CONT

CP conjunctive participle

cv compound verb

DAT dative
DET determiner

dual DU emphatic **EMP** ergative ERG exclusive **EXCL** feminine F focus FOC FUT future GEN genitive hortative **HORT** imperative IMP inclusive **INCL** IPFV imperfective locative LOC masculine M

NEG negation, negative NI noun incorporation

NOMLZ nominalizer
NOM nominative
OBJ object
PFV perfective
PL plural

possessive POSS perfect PRF progressive PROG prohibitive

PST past

PROH

question marker QM question particle QP

reflexive REFL subject SBJ singular SG

serial verb construction SVC

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# Chapter 1

# Introduction

# 1.1 Language Background

The word 'Tenyimia' first appeared in print in 1875 in the article "Rough Notes on the Angami Nagas and Their Language" by Captain John Butler, the then political agent of the Naga Hills. Butler observed that "the men of Mezoma, Khonoma, Kohima, Jotsoma, and their allies call themselves Tengimas." He also says that "the people seem to be quite ignorant of any distinctive tribal name connecting them to any particular group of villages." Based on the oral historic account, ten different tribes – Angami, Chakhesang, Inpui, Mao, Maram, Pochury, Poumai, Rengma and Thangal – asserted their common origin and formed the Tenyimia Union in the late 1960s. Despite their common descent, these people speak different languages. There is no single language which is intelligible to all of them. With the formation of the Union, the language which was spoken in an around Kohima – probably the most widely spoken among the languages of the Tenyimia due to its early documentation and other social factors – was recognised as the common language. Thus the term *Tenyidie* came to be used in the literary field.

Today, Tenyimia as a community speaks nearly ten different languages each of which is no less than *Tenyidie* or any other language as a language in its own right – in fact, majority of the Tenyimia do not speak or understand *Tenyidie* – and the selection of *Tenyidie* as the common language over these languages implies no denigration of their importance as a language. Here one can say that *Tenyidie* was given a special status not because of its grammatical structure but because of social factors<sup>2</sup>.

Teaching of *Tenyidie*, which was started by the American missionaries in the late 19<sup>th</sup> century, despite its continuity as an academic activity in schools was not seriously considered until 1963 when the then Board of Secondary Education, Assam, recognized the language as

<sup>&</sup>lt;sup>1</sup> Literally, *die* means 'language' and *tenyidie* means 'language of the Tenyimia.'

<sup>&</sup>lt;sup>2</sup> Comrie (2001) observed that the notion of 'major language' is primarily a social notion – languages become major (such as English), or stop being major (such as Sumerian) not because of their grammatical structure, but because of social factors.

one of the Modern Indian languages (MIL). Following the recognition, it was introduced at High School level. In 1988, the North Eastern Hill University (NEHU) introduced Tenyidie as an MIL course in Pre-University course. In 1994, it was introduced at BA (Honours) level, and in 1997, Nagaland University set up a separate department to offer a post-graduate course in Tenyidie literature and language. So far, it is the only Naga language taught at the university level (Kuolie 2006).

# 1.1.1. Language Group

Tenyidie belongs to the Tibeto-Burman language family. It is spoken in the North-eastern part of India, particularly in the state of Nagaland. According to Grierson (1903), Tenyidie belongs to the Western sub-group of the Naga group of Tibeto-Burman languages. Shafer (1955) places Tenyidie within the eastern sub-group of the Kukis section within the Burmic division of the Tibeto-Burman language family. Burlings (2003) puts Tenyidie in the Angami-Pochuri sub-group within the Kuki-Chin-Naga branch of the Tibeto-Burman languages. According to Kuolie (2006), it has 1261701 speakers.

### 1.1.2. Language Features

#### **Tone**

Tenyidie has five different tones: extra high tone represented by ("), high tone represented by ('), mid or level tone represented by (¬), low tone represented by (¬), and extra low tone represented by (¬). The examples are shown below.

```
riế 'pluck'
rié 'be in front'
riē 'intestine'
riè 'be similar'
reï 'bamboo'
```

As a morphemic entity, tone takes part in changing lexical categories. For instance, when the verb *kegei* 'fight' is nominalised, the tone of the second syllable changes from high ( ') to low ( '). Likewise the second syllable of the verb *rüzhü* 'play' changes from mid ( -) to low

(`) when it is nominalised. Thus we have *kègié* 'fight' and *rùzhū* 'play' as verbs and *kègeì* 'fight' and *rùzhū* 'game/match' as nouns.

In some contexts, the tone of the verb helps in identifying the different grammatical roles. For instance, when the first person and third person singular pronouns occur as argument of verbs like ngu 'see', and kie 'call', its grammatical relation, whether it occurs as a subject or as an object, is understood from the tone of the verb. In (1a) and (1b), the third person singular pronoun puo occurs as arguments of the verb ngu 'see'. In both the sentences, it occupies the same position and has the same tone but in (1a), it occurs as the subject, and in (1b), it occurs as the object of the verb ngu 'see'. In both the sentences, the tone of the verb provides the cue in making the subject/object distinction. Kevichüsa (2007) calls the verb with a high tone as  $V_A$  verb because it bears a closer relationship with the A NP and the one with a low tone as  $V_O$  verbs because it bears a closer relationship with the O NP.

- (1a) Themia puo ngú kecü u sia te
  1SG 3SG see COPM DET die PRF
  'The man whom he saw died.'
  - (b) Themia puo ngù kecü u sia te 1SG 3SG see COPM DET die PRF 'The man who saw him died.'

### **Aspiration**

Aspiration is phonemic in Tenyidie. Some examples where the non-aspirated word and its aspirated counterpart represent different lexical items are given below.

 $t\ddot{a}$  'run'  $t^h\ddot{a}$  'hair'  $t\dot{u}$  'burn'  $t^h\dot{u}$  'write'  $k\ddot{e}$  'go down'  $k^h\ddot{e}$  'be without food/fast'

Another aspect of aspiration in Tenyidie is that it indicates transitivity of a verb, that is, it takes part in determining the argument structure of a verb. In (2) there is only one argument because the verb pa 'break' is an unaccusative verb. In (3), the verb is aspirated and there are

two arguments; an agent *puo* 'she/he/it' and a patient *dzude* 'dam'<sup>3</sup>. The sentence describes a transitive situation.

- (2) Dzüde u pa te

  dam DET break PRF

  'The dam broke open.'
- (3) Puo dzüde u p<sup>h</sup>a shü
  3SG dam DET break put
  'He broke open the dam.'

#### **Tense**

Tenyidie is a highly agglutinative language. As such most of the grammatical features are marked morphologically. Verbs do not inflect for *tense*, and the different time references are understood either from the contexts or are marked periphrastically. The difference between past and present situations is indicated either by time adverbials or is understood from the contexts. Thus, one can say (4) to refer to a present situation. The same sentence can also be used to refer to a past situation, and be modified by a time adverbial as in (5).

- (4) Niu nashü baniu dance sit'Niu is dancing.'
- (5) A vor kecü ki Niu nashü ba
  1SG come COMP when niu dance sit
  'Niu was dancing when I came.'

As in English, the future time reference is indicated with by an auxiliary verb *tuo* 'will' which also functions as an imperative mood marker in other contexts. This marker is also used in marking sentences that express predictions, intensions, and plans of some agents which may or may have not the future time reference (Dahl 1985). Examples which illustrate this claim are shown below. In (6), the temporal meaning is clearly expressed, but in (7), the maker just indicates prediction without any temporal sense.

<sup>&</sup>lt;sup>3</sup> The verb *shü* which I glossed as 'put' functions as the light verb in this sentence. When it occurs as an independent verb, it can mean 'fill', or 'put/place'. It is explained in detail in Section 2.4.1.2.

- (6) A vor tuo

  1SG come FUT

  'I will come.'
- (7) No thedze u si ba tuo
  2SG story DET know sit FUT
  'You must be knowing the story.'

Since Tenyidie does not make past tense and present tense distinction, and the use of 'was/is' and 'are/were' becomes cumbersome while translating the different examples, I will use them randomly through out thesis – 'is' or 'was' will be used when there is a singular subject, and 'are' or 'were' will be used when there is a plural subject. Likewise, I will also use 'she' and 'he' randomly to translate the third person singular pronoun *puo*.

# **Aspects**

Aspectual information is provided by a number of bound morphemes. Tenyidie marks the *perfect aspect* and the *perfective aspect* differently – which according to Dahl (1985) and Comrie (1998) are two different aspectual categories which can never be equated. While the perfective aspect is described in chapter 2, I give a brief account of the perfect aspect here. Comrie (2004) says that the sentence 'Bill has gone to America' implies that 'Bill is now in America or is on his way to America'. He calls sentences of this type as 'perfect of result'. In Tenyidie, when the morpheme *te* is added to a simple denotative sentence, we get a similar sense. Example (8) means Jimo is now in America or is on his way to America. Without this marker, the sentence would simply mean *Jimo went to America*.

(8) Jimo America nu vo te jimo america LOC go PRF 'Jimo has gone to America.'

Dahl (1985) observed that "narrative contexts behave in special ways with respect to TMA (tenses, moods and aspects) marking in many languages." In Tenyidie, the perfect aspect marker te – which occurs in the example (8) above – changes to ta in two different contexts; in narrative contexts, and when it is followed by other TMA markers. Example (9) can occur only in narrative text. Examples (10) and (11) have ta because there are other TMA markers in the sentence final position.

- (9) Jimo America nu vo ta jimo america LOC go PRF 'Jimo has gone to America.'
- (10) Jimo America nu vo ta tuo jimo america LOC go PRF FUT 'Jimo will go to America (and be there)
- (11) Jimo America nu vo ta ya
  jimo america LOC go PRF HAB
  'Jimo goes to America (and be there)

Examples (8) and (9) have different markers, the former has *te* and the latter has *ta* to indicate the perfect aspect, but the sentences have the same meaning. The most plausible reason, perhaps the only reason to explain this difference is that the former occurs in a non-narrative context and the latter occurs in a narrative context. In a narrative text, sentences follow each other in quick succession. This could be the reason why (9) is marked like (10) and (11). If this speculation is correct, we can say that *ta* occurs in environments where another sound is expected.

For the experiential perfect sentences such as 'He has been to America' (Comrie (2004), Tenyidie has a morpheme *wa* shown in (12) which clearly differentiates the 'experiential perfect' from the 'perfect of result' such as 'He has gone to America' shown in (8)

(12) Jimo America nu vo wa te jimo america LOC go PFV PRF 'Jimo has been to America'

The imperfective aspects are indicated as in the examples given below. Habituals which describe situations which are characteristic of an extended period of time are marked in two different ways. As shown in (13a), the marker ya is used when the situation described still holds and, and vor 'come' in (13b) is used when the situation described no longer holds, i.e., the habitual past.

- (13a) Vozo zou kre ya vozo wine drink HAB 'Vozo drinks (wine).'
  - (b) Vozo zou kre vor vozo wine drink come 'Vozo used to drink (wine).'

Tenyidie indicates continuous aspect and progressive aspects differently. The continuous aspect is indicated by the posture verbs such as *ba* 'sit' and *that* 'stand' as in (14a). The detailed explanation of the different posture verbs is given in chapter 2. The progressive acts are indicated by *zie* as in (14b).

- (14a) Kuonuo nashii ba kuonuo dance sit 'Kuonuo is dancing.'
  - (b) Kuonuo vor zie kuonuo come PROG 'Kuonuo is coming.'

### **Negation**

There are four different negative morphemes in Tenyidie whose privileges of occurrence are determined by other elements such as tense and moods in a sentence. The negative morpheme *mo* occurs in non-future contexts as in (15). *lho* occurs in sentences which have future time reference as in (15b), *suo* is used as a prohibitive marker as shown in (15c), and *hie* is used in imperative sentences as in (15d). As in most of the Tibeto-Burman languages and some African languages, the position of these markers is always post-verbal.

- (15a) Niu nzhü ze mo niu last.night sleep NEG 'Niu did not sleep last night.'
  - (b) Niu vor lhoniu come FUT.NEG'Niu will not come.'

- (c) No cüu cü suo

  2SG that eat NEG (should not)

  'You should not eat that.'
- (d) Cüu cü hie
  that eat IMP-NEG (do not)
  'Do not eat that.'

#### Number

Tenyidie has what Corbett (2000) calls a "general number" where the meaning of a noun is expressed without reference to number – the meaning of a noun can be expressed independently of the number. As shown below in figure 1.1., apart from the general number, it makes three-way distinction; singular, dual and plural which are indicated by u, nie and ko respectively.

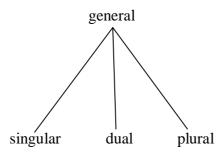


Figure 1.1 System with separate general number

To indicate the different number specifications the different number markers are added to the general noun in the following manner:

pera 'bird'

pera u 'the bird'

pera nie 'the birds (two)'

pera ko 'the birds (more than two)'

These number markers also function as definiteness markers.

#### Person

Tenyidie makes an inclusive/exclusive distinction in the first person dual and plural

pronouns. Pronouns in different persons are shown below:

```
a-vü 'we' (first person dual inclusive pronoun)
hie-nie 'we' (first person dual exclusive pronoun)
úko-/ń-ko 'we' (first person plural inclusive pronoun)
hie-ko 'we' (first person plural exclusive pronoun)
n-nie 'you' (second person dual pronoun)
nie-ko 'you' (second person plural pronoun)
puo-nie 'they' (third person dual pronoun)
puo-ko/ù-ko 'they' (third person plural pronoun)
```

#### Gender

Tenyidie does not have grammatical gender. Based on the natural or biological gender, the language marks the feminine gender with a bound morpheme  $pf\ddot{u}$  which also functions as a singular definite marker in the absence of other number markers.

```
    a kepetha u 'my teacher (male)'
    a kepetha pfü 'my teacher (female)'
    a sieze nie 'my younger brothers (two)'
    a dzürie ko 'my elder brothers'
    a dzürie pfü ko 'my elder sisters'
```

Pronouns do not inflect for gender, and the language has only one term 'puo' for the different third person singular pronoun 'he/she/it'. Verbs do not agree either in person or gender with any of their arguments.

```
(16) A puo kie shü

1SG 3SG call put

'I called him.'

'I called her.'

'I called it.'
```

### Case

The first and second person singular pronouns have different forms for nominative and

accusative case as shown below:

Nominative	Accusative	
á 'I'	à 'me'	
<i>nó</i> 'you'	<i>ì</i> 'you'	

Other NPs do not change whether they occur as a subject NP or as an object NP. The subject NPs are often followed by a marker -e. Kevichüsa (2007) says that Tenyidie follows a split ergative system with the "first and second person singular pronoun in the nominative, while the other **A NPs** including the third person singular pronoun **A NPs** are in ergative case." She says that the ergative case is indicated by the marker -e. However, as many native speakers consider the use of -e as an optional marker, I desist from further comment on this point.

Matisoff (2016) observed that in the Tibeto-Burman languages "verbs are often grammatically transformed into NP markers that function like Indo-European prepositions." In Tenyidie too, cases like *instrumental* and *comitative* are indicated by a grammaticalized verb. In (17) the verb *se* 'use' functions as the instrumental case marker and in (18) the verb *ze* 'receive/take' functions as the comitative case marker.

- (17) Puo si se a vü shü

  3SG stick use 1SG hit put

  'She hit me with a stick.'
- (18) Niu puo ze vor
  niu 3SG receive/take come
  'Niu came with him (Niu brought him).'

### Honorificity

Tenyidie does not indicate honorificity. But the language has two special terms, *ami* and *anie*, used to address maternal uncles and paternal aunts respectively. The paternal uncles who are always regarded with reverence are called *ami*, and the paternal aunts who are also regarded with special respect are called *anie*.

#### Word order

As in other Tibeto-Burman languages, word order is always Subject-Object-Verb (SOV). Except when there is a specific syntactic operation such as topicalization and relativization, word order is relatively fixed. The language exhibits the following SOV features.

Postpositions and not prepositions are used.

(19) Thevüdzü u thevükru nu ba chicken-egg DET chicken-nest LOC sit "The egg is in the nest."

Auxiliaries follow the main verb.

(20) Uko sodu rüzhü tuo

1PL tomorrow play will

'We will play tomorrow.'

The genitive marker precedes the governing noun

(21) Vozo nuo zuo
vozo GEN mother
'Vozo's mother.'

The modifiers follow the modified noun

(22) Leshü kezha u
book big DET
'The big book.'

In a relative clause, the head noun can occur in three different positions. It can follow the relative clause as in (23), it can precede the relative clause as in (24) or it can occur within the relative clause as in (25).

(23) [No sevor kecü] nhasi u khro se

2SG bring COMP fruit DET sour very

'The fruit that you brought is very sour.'

- (24) Nhasi [no sevor kecü] u khro se fruit 2SG bring COMP DET sour very 'The fruit that you brought is very sour.'
- (25) [No nhasi sevor kecü] u khro se

  2SG fruit bring COMP DET soar very

  'The fruit that you brought is very sour.'

# 1.2 Complex Predicate: An Overview

The term *complex predicate* is used to designate a wide variety of constructions. Currently, there is no widely accepted definition, no agreed set of criteria on which a particular construction is classified as 'complex'. Theorists do not quite agree on how complex predicates are formed, but a commonly held view is that it composes of "more than one grammatical element, each of which contributes part of the information ordinarily associated with a head" (Alsina el at. 1997:1). The processes involved in the formation of complex predicates differ from language to language. Even within a language, they fall into different categories. For instance, in Hindi, both the *aspectual complex predicate* and *permissive constructions* are treated as complex predicates, but they belong to two structurally different types of constructions (Butt 1995).

South Asian languages and West African languages abound in complex predicates. As such, it has attracted the attention of many people, and many have defined it in different ways. I quote some of them below to give a general idea of how they are described in the literature.

"The term is usually employed to refer to construction whose constitutive pieces can appear separately in phrase structure. But it has also been used to refer to the merger of two or more morphological entities resulting in a morphologically integrated (though syntactically not atomic) entity." (Verma 1993: vii)

"Complex Predicate can be defined as predicates which are multi-headed; they are composed of more than one grammatical element (either morphemes or words), each of which contributes part of the information ordinarily associated with a head." (Alsina 1997:1)

"A Complex Predicate construction is one in which two semantically predicative elements jointly determines the structure of a single syntactic clause." (Mohanan 1997: 432)

"[T]he term complex predicate is used to designate a construction that involves two or more predicational elements (such as nouns, verbs, and adjectives) which predicate as a single element, i.e., their arguments map onto a monoclausal syntactic structure." (Butt 2010:49)

"A predicate is said to be complex with reference to the head of the predicate. The head of the predicate is normally an  $X^0$  category, whereas a complex predicate is multi-headed. Thus, the term 'complex predicate' properly construed is shorthand for complex predicate head." (Baker and Harvey 2010:2)

Monoclausality is regarded as one of the characteristic properties of complex predicates, and many writers use this property as a diagnostic for determining whether a particular construction is a complex predicate or not. A large chunk of complex predicates profiles a generalized, complex state or event, where the sub-events combine to designate a coherent, familiar situation or experience that constitutes a cultural unit, or what is conceptualized by native speakers as a single event (Goldberg 2010). Despite the apparent commonalities, complex predicates in some aspects pattern with prototypical words, while in some other they pattern with prototypical phrases. It is due to these reasons that there has been an enduring theoretical interest in complex predicates, the analysis of which is seen as a promising enterprise for the understanding of the essential properties of languages.

A number of describers have looked at the phenomenon from different angles to provide answers to the question of the nature of complex predicate, and also to understand which constructions qualify as complex predicates. Here, I review some of the works on the complex predicates and predicate formation which I consider important for the proper understanding of the phenomenon and relevant for identifying similar constructions in Tenyidie in the succeeding chapters.

### Butt 1997, 2005.

According to Butt (2005:1), "a complex predicate consists of a main predicational element (noun, verb or adjective) and a light verb that is usually the syntactic head of the

construction." A light verb combines with the stem form of the main verb to form a single syntactic predicate, and both the constituents contribute lexically encoded semantic information to the semantics of the construction. In *aspectual complex predicates*, the light verb serves as an event modifier, that is, it serves to modulate the primary event predication of the main verb/noun. In Hindi, light verbs in a past tense sentence generally signal the completion or inception of an event.

Referring to (25) below, Butt (1997) says that the two predicates always form a constituent. The main verb is always in the base form while the light verb carries the inflection. The two form a tight unit and as a result, they are often analysed as compound verbs<sup>4</sup>.

# (25) vo ro paṛ-aa

Pro=Nom weep fall-Perf.N.sg

'He fell to weeping (burst into tears).'

She says that a complex conceptual event is governed by what is perceived to be a "normal" event. This explains the presence of the sequence *buy take fish* but not *sell take fish* in Sranan. She further mentions that the degree of cohesion between the different subevents within a complex conceptual structure is language-dependent because it is influenced by the conceptualization of causation.

### Williams 1997.

William (1997) classifies complex predicates into two different categories; lexical and phrasal. He says that while lexical complex predicates involve only lexical element, phrasal complex predicates contain non-maximal phrasal material. On the surface, lexical complex predicates resemble small clause constructions. For instance, 'John wiped the table clean' and 'John considers the table clean' have the same surface form, but only the former can appear in the form 'V Predicate NP' without the conditioning environment of heavy NP shift. In a small clause construction, *heavy NP shift* is obligatory. This is shown in (27) below. (27a) has the same forms as (27b). In (27c), there is no NP shift and 'make clean' occur together and

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<sup>&</sup>lt;sup>4</sup> Since emphatic particles and markers of negation can appear between the constituents, she says that the construction must be formed in the syntax, and not in the lexicon.

the sentence still remains grammatical. (27d), on the other hand, is ungrammatical because there is no NP shift.

- (27) a. John wiped the table clean
  - b. John considers the table clean
  - c. John wiped clean the table
  - d. \*John considers clean the table

He says that a lexical rule given in (28) can be used to explain the formation of lexical complex predicate above, and can as well be extended to cover other complex predicate constructions but not small clause construction.

$$(28)$$
 V  $\rightarrow$  V A

The other variety of complex predicate which, he says, is syntactically derived is found in French causative constructions. Of the three different types of causatives constructions in French, he says that the *faire* à dative causative construction comes under the phrasal complex predicate. In (29) the derived form, Vx is not lexical but is not maximal either. It is not lexical, because it contains phrasal material, and it is not maximal because it is the head of a VP which contains dative argument. He says that the V+VP form a constituent apart from the dative NP

(29) Jean [fait[manager la pommeVP] $V_X$  à Pierr]

'John made peter eat the apple,'

#### Mohannan 1997

According to Mohanan (1997:432), a predicate becomes complex when "two semantically predicative elements jointly determine the structure of a single syntactic clause." He says that a wide range of predicate types participate in the phenomenon of complex predicate constructions. Nouns, adjectives, and non-finite forms of verbs can all combine with verbs fairly productively to form complex predicates. In a complex predicate construction like (30), the number, meaning, and the case of the arguments are jointly determined by the noun and the verb. The construction is monoclausal, and it has only one syntactic predicate.

(30) raam-ne mohan-par **b**<sup>h</sup>arosaa **kiyaa**Raam-E Mohan-L reliance/trust-N do-PF

Ram trusted/reliance on Mohan

He says that the third argument 'Mohan' in (30) is not licensed by the verb kar 'do', and the only plausible account for this additional argument is that it is licensed by the noun  $b^harosaa$  'trust'. In other words, the nominal element  $b^harosaa$  participates in predicatehood in that its presence leads to an increase in the number of arguments in the clause.

He further says that N+V constructions in Hindi fall into two classes; those in which the nominal host is a syntactic argument, and those in which it is part of the syntactic predicate. Looking at the presence of the split system of the nominal host, and a wide range of complex predicate types, he says that the phenomenon of complex predicate construction allows for a certain degree of variabilities like other syntactic operations such as anaphor binding, control, and causatives.

#### Ackerman and Webelhuth 1998

Ackerman and Webelhuth (1998) ask "how can we represent what is the same among languages, while also accounting for the patent differences between them," or "how can the information packaged into a single word in one language which is often expressed by several independent words in another language be explained?" As an answer to this question, they postulate a lexicalist approach to the understanding of predicate formation. They argue that a predicate is a "theoretical construct", an "abstract unit of clausal organization which does not exhibit a unique mapping into a single formal expression cross-linguistically, although it does exhibit a diachronic tendency to be encoded by a single morphological object."

They further claim that predicates are the "determiner of central properties of clauses", and they are best understood as "units of lexical representation." Based on the following assumption, they developed a lexicalist proposal for the construct of a predicate.

- Only lexical and not syntactic rules can create new argument structures (lexical Adicity)
- Only lexical but not syntactic rules can create or analyze morphological words (Morphological integrity).

 Lexical representations are preferably expressed by single synthetic word forms but can also be expressed by combinations of words without joint morphological status (morphological expression)

To them, 'Lexicalism' as a theory is first and foremost a hypothesis about content-theoretic objects, and secondarily a hypothesis about form. And lexicalism or lexical representation for the predicate, which is a cluster of concept, encodes both the content and the form associated with the Sausurrean sign, that is, the sign as a whole is a combination of various aspects of form and content. From the content-theoretic point of view, it (predicate) contains functional-semantic information concerning the meaning of the predicate, its semantic arguments, and their grammatical function status, as well as morpho-syntactic content providing values for such properties as tense, aspect, polarity, agreement. In other words, it is the content-theoretic head of the clause.

In the process of expounding their theory, they grouped the predicates into separable and inseparable predicates: predicates that permit syntactic separation and those that do not. This division helped them in accommodating predicates with separable particles within the theory they propose. In support of this categorisation, they cite Jartseva (1963) who claimed that in analytic form, "lexical and grammatical meanings are transmitted disjointly and that the degrees of coalescence between the elements of analytic word forms vary according to the historical development manifests in a given language."

By modifying the classical lexicalist view on *morphological Expression* from a principle that cannot be violated to a 'preference principle', they argue that it is theoretically possible for the syntactically discontinuous expression to function as one predicate. The preference principle for the surface representation of a predicate is stated below:

"Predicates are preferably expressed by single categorial words but can also be expressed by combinations of such words."

The principle simply means that predicates are mostly expressed by a single categorical verb, but there can be a single predicate represented by multiple syntactically independent forms. The independent constituents within a predicate are analyzed as phrasal co-heads as they contribute information to a functional structure associated with a single clause nucleus. They argue that predicates can be interpreted as "a composite of information created by the co-occurrence of the co-heads in a phrase." As such two or more independent categorical

elements can be construed as constituting a unit at some level of representation specifically at the functional level. While the preferred spell-out of predicates is in terms of a single morphological word, the marked choice of a spell-out in terms of more than one independent word is dispreferred but possible. Predicates with separable particles make use of this marked realization option of morphological expression, they argue.

### Rappaport Havov and Levin 1998, 2008

Rappaport Havov and Levin (1998) observed that verbs generally belong to two different classes: *manner verb* and *result verb*. They then point out that these two different verb classes differ in their aspectual classifications: manner verbs are activities, whereas result verbs are either achievements (e.g., arrive) or accomplishments (e.g., transitive *break*). In line with the observation made by others that languages differ in the way similar experiences are represented, they say that "the range of meanings available to members of a particular verb class in one language may not be available to the members of the corresponding class in another language". Thus in English a change of state verb such as 'break', 'dry', or 'widen' lexicalize a particular achieved state, and they denote the bringing about of a state, but they leave the description of the activity involved unspecified, that is, such verbs do not lexicalize the manner specification.

Of the two different classes of verbs, result verbs, especially those which denote *Accomplishments* have complex event structure, composed of two sub-events: the causing event, and a change of state. They propose a common template for all such verbs. The template is given in (31). In the representation, the first sub-event of an accomplishment has the representation which is associated with activities given in (32), while the second sub-event has the representation associated with achievements given in (33).

(32) [xACT]

(33) [BECOME[x <STATE>]

They say that the template entails the possible variations in meaning as a particular activity can be used to yield various kinds of accomplishments, such as a change of location, a change of state, or the coming into existence of some artefact. In each instance, the addition of the resulting state is signalled by an element in the syntax. This claim is supported by others like

Goldberg (2010:43) who says: "predicates that designate both an activity and the endstate of that activity – accomplishments – satisfy the criteria of involving two sub-events that are causally related." Pustejovsky (1991:42) also says that "when a verb makes a reference both to a predicate opposition and the activity bringing about this change, then the resulting aspectual types is an accomplishment."

On the internally caused change of state verbs, Rappaport Havov and Levin (1998) argue that if verbs like 'blossom' are assumed to be associated with a state template [x<IN-BLOSSOM>], then by the addition of the predicate BECOME to the template, an achievement template can be derived. Thus by template augmentation a new template is derived [BECOME [x<IN-BLOSSOM>]]. This accounts for the difference in the behaviour of the two types of change of state verbs.

### Goldberg 2010

Like Ackerman and Webelhuth (1998), Goldberg (2010:39) also asks: "In what ways can events combine to form a single predication?" Or what combinations of sub-events can a single verb refer to? In response, she says that "the only constraint for the combination of events designated by a single verb is that they (events) must constitute a coherent semantic frame." And to consider a particular situation or experience as coherent, it must be construable as a unit. She further says that each word sense evokes an established semantic frame, and within the frame a word profiles what it designates or asserts; its background frame is what is taken for granted or presupposed. The background frame, particularly in the case of verbs may involve complex events that are spread out over time. She gives the following equation for a word sense:

A word sense's semantic frame (what the word mean' or evokes') = profile + background frame

A word sense's profile: what the word designates or asserts

A word sense's background frame: what the world takes for granted, presupposes

In a sentence, the verb meaning corresponds to the semantic frame of predication which designates generalized, possibly complex states or events that constitute cultural units. While the verb profiles certain aspects of the semantic frame, the background frame is left unspecified. Sometimes the sub-events within a semantic frame designate both the manner

and result but they are not always casually related. She also says that in the causally related subevents, the activity, and the resulting state are counted as two distinct subevents because the resulting state does not completely overlap temporally with the activity. The two subevents are considered as causally related only when the activity is sufficient to bring about the change of state described.

For a situation to be labelled by a verb, the situation or experience may be hypothetical or historical and need not be directly experienced, but it is necessary that they evoke a cultural unit that is familiar and relevant to those who use the word. If the situations were wholly unfamiliar to speakers of a language, then there would be no frame for the situation and no corresponding label for the situation. To her, the only constraint appears to be that a single verb's meaning cannot involve two or more subevents that are not related by a semantic frame. She calls this as the "conventional frame constraint."

#### **Durie 1997**

Durie (1997:321) says that "the verbal system of a language evolves as a categorization of event-types that are salient, or communicatively in demand for the speech community," and "sub-communities develop their own sub-inventories of verbs, to distinguish salient event-types which are of significance to them." The use of a single lexical item in a non-serializing language to represent a particular situation which in serializing languages is represented by a series of verbs reflects that different speech communities organise their verbal elements differently on the one hand and the codification of that situation as a salient distinct event type by the different speech communities on the other.

He argues that in verb-serializing languages the classification of observed (or rather described) phenomena into distinct event-types is at least partially mediated by the verb serialization system. It is not that a smaller inventory of event-types is recognized, rather, event-types are represented as complex with recurring components. Thus 'tell' is often represented by 'speak+give' and 'bring' by 'hold and come', with the individual verbs embodying different components of each event. In this sense, a serial verb chain fulfils a function in a serial verb language similar to that of an individual verb in a non-serializing language. In other words, a clause incorporating a serial verb chain in a serializing language fulfils a function similar to that of a clause built around a single verb in a non-serializing language.

He also says that it is not only in the use of a verb series for a single lexical verb in the non-serializing language but also in the argument structure that serial verb constructions are treated as the translational equivalents of non-serial, mono verbal clauses in nonserializing languages.

Referring to (34a) and (34b) below, he says that there is no grammatical reason why only (39a) should be grammatical, and writers are at a loss for an explanation, as selling and buying food items are common-place every day events in societies with local markets. He speculates that the unacceptability of (39b) will find its proper explanation in the stereotypical schema for event-types, which are "culture-specific to varying degrees." He also suggests that to account for the difference in the acceptability of a sentence, one has to look into the conception of event type which according to him should be based on "what speakers habitually treat as unmarked complex events."

(34) a. o ra işu wá she bought yams come 'She bought the yams and came'

(35) b. \*o ta işu wá

She sold yams come

### Jarkey 2010

According to Jarkey (2010:112), human beings classify their temporal world into discrete events just as they classify their physical world into discrete entities. As such, a 'conceptual event' languages develop becomes both a cognitive and a cultural construct<sup>5</sup>. He says: "it is a cognitive construct in that it is a means by which we deal with our temporal experience as a metaphor for the way we deal with our physical experience." It is also a cultural construct in that, "while our common cognitive make-up results in significant commonalities in what can constitute an event token across language, cultural differences can result in variation with regard to precisely what are considered the salient boundaries of eventhood in some cases."

<sup>&</sup>lt;sup>5</sup> He defines a conceptual event as "an event which is construed and presented as a single event in a particular utterance base on language-specific constraints".

He says that in White Hmong, two common elements – the frequent association of the two actions, and their cotemporal occurrence – licence multiple actions to be viewed as a single 'conceptual event' and allow them to occur together within a single clause. And when multiple actions are viewed together, they are understood not as transferring an action in relation to an object, but as portraying the action of the subject in detail, "providing colour and elaboration to the description of the event."

As observed by different writers, constructions which come within the parameter of complex predicate exhibit a wide range of meanings. Resultative events, concomitant situations, and subsequent event show up as complex predicates in many of the languages. Related to these constructions are the causative and the permissive constructions, where one of the components expresses some sort of causation or permission of the event described by the other constituent. Others like benefactive, malefactive, instrumental, and desiderative notions are also expressed in a similar configuration (Svenonius 2008). Traditionally, only verbs and adjectives were treated as predicates, but several writers have shown that in South Asian languages, the category Noun is also a potential candidate for predicate function. Thus the term complex predicate has come to be used as a cover term for compound verbs or light verb constructions, causative construction, resultative constructions serial verb constructions, particle + verb constructions, and noun incorporation among others.

The succeeding chapters heavily depend on the claims and observations made by different writers above. For example, the observations made by Butt on complex predicate are used in delineating the compound verb constructions in Tenyidie; the template provided by Rappaport Havov and Levin, and Goldberg's observation on predicate formation are used in explaining the causative constructions. Durie and Jarkay's arguments on serial verb constructions provide support in explaining the serial verb constructions in Tenyidie, and Mohannan's contributions to the understanding of complex predicate provide a strong argument in favour of treating the phenomenon of noun incorporation as a case of complex predicate formation. Ackerman and Webelhuth's claim that a predicate can be expressed by combinations of different categorial words lies at the base of many of the claims in the thesis.

# 1.3 Objective

The goal here is to look at the constructions that have two or more predicational elements in sequence and to classify those constructions that form single predicate or show properties of monoclausal structure as *complex predicates*. To my knowledge, so far, no one has looked at this topic in Tenyidie. The endeavour here, therefore, is to provide a detailed description of the different kinds of construction that fall under the category of complex predicate. It is primarily/purely descriptive except for some few theoretical assumptions employed for heuristic purposes – it does not attempt to tie the observations to any particular linguistic theory.

# 1.4 Organization

The thesis is divided into six Chapters, including the introductory Chapter. I give a brief account of each of the Chapters here. Chapter 2 deals with the compound verbs constructions in Tenyidie. I show that in a lot of verb sequences, the second verb act as the light verb and the construction gets a compound verb reading as in other languages. I group the different light verbs into three different types based on the kind of information they add to the predicate: the first type adds benefactive sense to the predicate, the second type adds meaning related to inception and extension, and the third type adds a continuative sense to the action or event encoded by the main verb. I conduct a constituency test and show that the verbs in sequence belong to the same constituent.

Chapter 3 describes the different causative expressions. Depending on the aspects such as morphology, transitivity, and the type of causation they indicate, I put them under five different types, namely, lexical causatives, transitive-unaccusative alternations, causative alternations, resultative constructions, and permissive constructions. I conduct a clausal test and show that the first four types exhibit properties of monoclausal constructions, the last type, that is, the permissive constructions, shows properties of bi-clausal structures. In the concluding Chapter, I show that the constructions that are biclausal in nature do not qualify as complex predicates.

In Chapter 4, I look at the phenomenon of serial verb construction. Using the characteristic features of serial verb constructions seen in other languages as cues, I identify seven different kinds of serial verb constructions in Tenyidie, namely, multi-event serial

verbs, dative serial verbs, instrumental serial verbs, comitative serial verbs, directional serial verbs, causative serial verbs and resultative serial verbs. I classify them into nuclear juncture serial verbs and core juncture serial verbs based on the cohesion between the different verbs in sequence. I then conduct clausal tests and show that the verbs in series belong to the same clause.

Chapter 5 argues that Tenyidie is an incorporating language. I show this by comparing the properties the incorporated nominals in Tenyidie with the incorporated nominals in other incorporating languages. As a predicating element, the incorporated nominal does not appear as a syntactic argument and so it is not extractable by syntactic rules such as topicalization and WH questions. Instead, it takes part in determining the argument structure of a clause. I show that the incorporated constructions describe institutionalised activities, weather-related events, and body movements and emotional experiences associated with different body parts

In Chapter 6, I show that the different constructions described in the preceding chapters display properties of complex predicate with the exception of permissive constructions described in Chapter 3. I show that the constituents involved in the constructions contribute to the semantic content of the predicate, and they together determine the argument structure of the predicate.

# Chapter 2

# Compound Verb Constructions in Tenyidie

# 2.1. Introduction

Natural languages employ different devices to encode information about different human experiences. The constructional devices available to them vary from language to language. As such, the way ideas and concepts are encoded also differ from one language to language. Compound verb construction is one such device peculiar to the South-East Asian languages. This phenomenon is widely accepted as one of the major areal features of the languages spoken in the area. Over the years, it has come to acquire names such as *modified verbal expression*, *explicator compound verbs*, and *compound verb constructions*. The term "complex predicate" is often used as a cover term for the different constructions with similar structures in the literature on South Asian languages.

Compound verbs have interested linguists for many years. As a phenomenon, it has been studied extensively in many of the languages especially those that belong to the Indo-Aryan and Dravidian families. However, as noted in Abbi and Gopalakrishnan 1991, no serious attempt has been made to study the construction in the languages of the Tibeto-Burman family. In this chapter, I look at the nature of compound verb constructions across languages and place Tenyidie within a cross-linguistic context.

The chapter is organized as follows. In Section 2.2, I review some of the important works on compound verb constructions. In Section 2.3, I differentiate *compound verbs* from the *auxiliary constructions* and *serial verb constructions* in Tenyidie. Section 2.4 describes the semantic content of the different light verbs and examines the aspectual information they encode when they occur in different predicates such as stative predicates, progressive predicates, and predicates of other eventualities. Section 2.5 examines the constituency status of the elements involved. Section 2.6 summarises the chapter.

# 2.2. Compound Verb Constructions: An Overview

According to Hook (1993), the phenomenon of compound verb formation is an innovation in Indo-Aryan, first attested in the *Buddhist Pali* stories from Sri Lanka. The phenomenon has attracted the attention of linguists and grammarians of West African and South East Asian languages for several decades. In the case of the South Asian languages, as Kachru (1993:115) observed, "the phenomenon usually forms an integral part of the traditional grammars and contemporary descriptions of individual languages", attested by a large amount of literature. It is treated by many (Masica 1976, Kachru and Pandharipande 1980, and Hook 1988 among others) as one of the important areal features of the South Asian languages.

As a sub-type of complex predicates, compound verb refers to the combination of two or more verbs whose sequence constitutes one functional-semantic unit. I quote Abbi and Gopalakrishnan (1991) below to show how it is generally understood.<sup>6</sup>

"By explicator compound verb we mean a sequence of at least two verbs V1 and V2 where the first member is the main or predicating verb and the second member, although homophonous with an independent verb in the language, does not appear with its primary lexical meaning; V2 only occurs in the sequence to mark the main verb V1 for certain 'grammatical' features." (Abbi and Gopalakrishnan 1991:687)

To help in the identification of compound verbs in Tenyidie, a brief summary of some of the most often cited works on the topic is provided below.

#### 2.2.1. Hook 1974

Hook (1974) defines compound verb as a "sequence of verb stem plus verb stem plus desinence in which one stem (usually the second) cannot be derived from its own separate clause or [s NPX[v-]] structure, yet which is homonymous with an item that can." He calls the second stem as *vector verb* and says that verbs that belong to this category are fully

<sup>&</sup>lt;sup>6</sup> V2 in the verb sequence has been variously called as 'light verb', 'vector verb', and 'explicator'. Here, I use 'light verb' and 'V2' interchangeably throughout the thesis.

emptied of their lexical content. They are grammaticalized; as such the occurrence of any given vector, as opposed to its absence, does not so much alter the meaning as the presence of their homonymous counterparts among the main verb would in a sentence. Because compound verbs, when negated, lose their *vector*, with some explicable exception, he differentiates vector verbs from auxiliaries by putting them to 'sensitivity to negation' test.

Hook (1993) in another paper "Aspectogenesis and the compound verb in Indo-Aryan" commented that in some Indo-Aryan languages such as Hindi-Urdu and Marwari, compound verbs evolved into an explicit means of expressing the perfective aspect.

### 2.2.2. Dasgupta 1977a

Dasgupta (1977a) says that a compound verb contains one and only one major verb or pole. The vector is a minor in that it is semantically heteronomous and grammatically subservient. Of the two constituents of compound verbs in Bangla, the vector is inflected for tense, mood, aspect, and person, and it indicates the orientation or manner of the action or process expressed by the other.

Contrary to what Hook (1974) claimed, he says that, in a compound verb, the *vector verb* plays an important role in the selection of complements, and I quote him:

"Quantitatively speaking, vectors may not take complement (etc) of their own in addition to the complements (etc) of the pole. Qualitatively, they may on occasions influence or compel the selection of some particular complement (etc.) RATHER THAN one that the pole alone would have selected, and when this happens it is fair to view that phrase as a complement (etc.) of the compound verb and not just of the pole: but this happens quite seldom." (Dasgupta 1977a:73-74)

He says that in combinations like *bhebe mOra* "to think-and die" 'to kill oneself thinking', *bole phEla* "to say-and drop" 'to say something one didn't mean', and, *kore deWa* "to do-and give" 'to do as a favour', the vector verbs retain their full verb or independent meaning much more than the common observations on the meaning of vector verb would lead one to expect. However, even in these constructions, the contribution of the vector always comes as a 'nuance', he adds.

He further says that some of these vector stems are polysemous and their different senses correlate with quite different grammatical properties. For instance, the stem *aS* means 'come' as a pole. As a vector, it indicates something like a progressive perfect aspectuality in some contexts. In other contexts, it conveys a sense of "imminent completion of an action not necessarily spread out over a long period." For the semantically heteronymous verbs like *naW* 'take' – which remain the same morphologically despite the sharp contrast between its vector function and its polar function – he uses a double negation test to tell the different readings apart. Since a vector is not entitled to any complement or modifier of its own, he says that a *pole-vector* sequence may be negated once (and only once), but a pole sequence can allow double negation.

## 2.2.3. Abbi and Gopalakrishnan 1991

Explicator Compound Verbs (EVCs) according to Abbi and Gopalakrishnan (1991) are concatenation or sequences of two verbal forms, of which, the first is in stem or some non-finite form, while the second is the morphologically finite verb that is marked for relevant grammatical categories such as person, number, gender, tense, aspect, and modality. According to them, the second verb or the explicator plays a very important role in the formation of compound verb; therefore their identification is crucial for the identification of ECVs.

They say that although de-lexicalised, explicators are not as grammaticalised as tense makers, modal, and aspectual auxiliaries, and they contribute specific shades of meaning to the compound which they would not indicate outside the compound verb constructions. Explicators together with the main verb form a "complex lexeme" and function as a single though complex unit represented by V, while constructions consisting of a main verb and auxiliary verb form a VP. Like the auxiliaries, explicators also belong to a closed set of limited members, and they combine in most case with more than one lexical verb and are often identified as 'grammatical' elements. However, as a category, they provide information different from what auxiliaries indicate such as ASPECTUAL, ATTITUDINAL and ADVERBIAL meanings.

Another difference they observed between auxiliaries and vector verbs is the "binary distinction." They say that the non-occurrence of an auxiliary in a given context indicates the

non-occurrence (or negation) of the meaning denoted by it. The aspectual meanings of vector verbs, however, are not of this nature, that is, the non-occurrence of an explicator verb does not indicate negation of its meaning. In other words, the absence of an explicator in a predicate does not entirely rule out the meaning expressed by it in the way the absence of an auxiliary does.

Due to the absence of any definable feature which neatly divides different verbal categories, they propose to consider them as belonging to a continuum where the *main lexical verbs* come at the top in a cline of verbiness, to be followed by *tensual*, *aspectual* and *modal auxiliaries* that shade off into *explicators*. They, however, say that this proposed cline is to be perceived not as a fixed but as a dynamic fluid; "one having no definite cut off points, and that an element of one type may move upwards or downwards along the cline of verbiness to evolve into elements of another type."

#### 2.2.4. Rao 2002

According to Rao (2002), the different constituents in a compound verb behave as a single morpho-syntactic unit. They are not derived from bi-clausal structures, and as a composite structure, they behave like simple verbs in many respects. For instance, when they are modified by an adverbial modifier, not one component but the entire structure is modified.

He says that as in any other languages, compound verbs in Telugu involve two components, and for all the purposes of morphological and syntactic interpretation, the V1 which is the semantic head of the compound is dependent on V2. Referring to the construction *Kuuliilu iLLanu kuulc-i+paareeSaaru* 'the coolies have pulled down the houses,' he says that The V1 *kuulc-* contributes only to the semantic substance of the entire compound verb, but not to its grammatical function. The V2, on the other hand, contributes to the compound grammatical information related to the argument structure, aspect, and mode. He further says: "V2s bring changes in the valence, voice, and certain aspects of the viewpoint of the action denoted by the main verb, and indirectly enriches the lexical content of the compound verb."

## 2.2.5. Singh 1990

Arguing against Porizka's (1969) claim that compound verbs are developed from simple verbs to marked the perfectivity of an event, Singh (1990) says that compound verbs (CVs) are not related to viewpoint aspect, and perfectivity is not the cause of the presence or absence of compound verbs. He instead argues that V2s occur to mark telicity. Citing (1) as an example, he says that the use of the perfective form merely indicates that an activity has ended, and that a simple verb cannot be used to denote achievement and accomplishment.

(1) Usne kal muurti banaaii
He yesterday statue make-PERF
He made a statue yesterday, for some time
(He worked on the statue yesterday.)

He says that accomplishments such as 'draw a circle' or 'eat an apple' are heterogeneous, and consist of a process and an associated outcome. When the endpoint is reached, the action does not continue as part of the same situation type. In events of this kind, there is always a sense of completion which is like their defining property and are they obligatorily expressed in CV. He claims that in telic events the natural endpoint is always indicated, and they always have a CV constellation

On state predicates, he says that since they do not have endpoints and they do not have perfective sense, CVs cannot be used to refer to arbitrary endpoints, therefore CVs do not describe state predicates. For instance, in predicates like *wo lambaa hai* 'he is tall', there is no endpoint. When a V2 is added to such a predicate as in *Wo lambaa hone lagaa* 'He started to become tall' or *Wo lambaa ho gaya* 'He became tall', the endpoint becomes visible, and the situation described becomes telic. V2s with state verbs focus on a change into a particular state or a change out of a state. Since atelic events, like activities, have an arbitrary endpoint, only simple verb constellations are possible. He says that the use of CVs with stative and atelic constellations results in the inchoative, ingressive and inceptive predicates.

#### 2.2.6. Butt and Lahiri 2003

On the development of light verbs, Butt and Lahiri (2003) provide a slightly different view. They see the full and light verb variants of a verb as standing in an intimate association. They claim that although a light verb is form identical to the main verb, the predicational

contribution is not that of the main verb. Rather, it serves to modify the main verb's semantics by expressing notions as such *completion, inception, benefaction, forcefulness, suddenness or volitionality*. In other words, they contribute lexically specified predicational material which interacts with the syntax and semantics of the main verb. They consider the light verb as having an incomplete argument structure, which seeks to combine with the argument of the main verb. When the argument structures of the two verbs fuse it results in a monoclausal structure and a complex predicate is formed. Like verbs are considered to have special syntactic status due to this special predicational property.

One of the main claims of this paper is that while light verbs are seen as a historically dead end, auxiliaries develop from full verbs via diachronic processes, and then may develop further into affixes. This claim differs from one of the commonly held views which says that light verbs are the result of the semantic bleaching of the main verb. They argue that there is one "underspecified entry" which allows both a light verb and a full verb uses. While the full verbs change into auxiliaries, which further change in function from the one they originate from, light verbs remain form-identical to the main verb through out. Any morphological change undergone by the main verb is also undergone by the light verb.

They also say that the function of a light verb in a compound is not to signal perfectivity but to create a different kind of *aktionsart*. To them, compound verb formation is an instance of "co-predication where both the verbs combine to provide a single predicational head." Therefore, there is no embedded clause, no subject control, and only one possible object.

### 2.2.7. Kachru 1993

Writing on the *serial verbs* in Tamil, Kachru (1993) says that despite the individual differences among languages, verbs in sequence exhibits a remarkable similarity between both genetically related and unrelated groups of languages. He says that the verbs in series undergo different stages of grammaticalization especially the second and subsequent members, and this grammaticalization process differs from language to language. While some retain their verbal characteristics to a great extent, others become more like a preposition. In such constructions, the meaning conveyed is not the sum of the parts conveyed by the verbs in series.

He is also of the view that, in the majority of cases, the use of serial verbs, as opposed to the simple verb, depends on speaker's attitudes and intensions; therefore it will only be hard to isolate the syntactic environments in which a serial verb occur.

#### 2.2.8. Paul 2004

To Paul (2004), V2s in compound verbs share with their corresponding full verb a *core* meaning. As such the relation between them is identified as one of polysemy. Unlike the auxiliaries which are completely stripped of the core sense and function as pure grammatical categories, the V2s add semantic nuances to the predicate.

The verbs in sequence in a compound verb constitute one functional-semantic unit and they do not express two separate events or do not head separate clauses. In other words, the event represented by a compound verb cannot be substituted by two conjoined independent events. The verbs in the sequence are not negated or modified separately. The semantics of V1 is extended or modified, and the resultant construction acquires a meaning slightly different from the one denoted by the V1.

She further says that the bond between the components in compound verb constructions differs from language to language. Thus, the member-verbs in Hindi-Urdu and Marathi are more tightly knitted than those of the member verbs in Bangla in syntax. In Bangla certain words can intervene between the different components, rendering the sequence discontinuous which indicates that the two Vs in a compound do not form a close-knit constituent structure. On the one hand they behave as an independent constituent on the surface, and on the other hand, they act as a single unit and provide the base for various morpho-syntactic operations.

# 2.3. Identifying Compound Verbs in Tenyidie

From the works summarized above, one learns that compound verbs have at least two verbs in sequence; the first verb contributes the primary semantic substance, and the second verb — which is partially bleached of its semantic content — provides the grammatical features and other notions such as *inception, completion, volitionality, force, benefaction*, etc. Of the two constituents, the first verb which is variously called as the *main verb, pole verb*, or *head verb*,

is selected from an open class, while the second verb which is also called by names such as *light verb*, *vector verb*, and *explicator* is selected from a closed set of verbs.

Not every construction that has two or more verbs in sequence qualifies as compound verb constructions or exhibits the properties mentioned above. There are constructions where one of the verbs is the main verb and the other is an auxiliary verb. There are serial verb constructions where both the verbs enjoy the privilege of governing complements of their own or act as a semantically autonomous predicating element - *two poles* in sequence (Dasgupta 2009). Though it may not be possible to state where the cut off points between the different constructions lie as Gopalakrishnan and Abbi (1992) said, each construction has properties specific to the construction. Based on features/properties which are considered as cross-linguistically stable properties of compound verbs, I differentiate compound verbs from other similar constructions. The features are given below.

- Compound verbs contain one and only one major or pole verb
- The second constituent or the V2, although homophonous with an independent verb, does not appear with its primary lexical meaning (does not have the autonomous meaning).
- The second constituent is not entitled to any complement or modifier independent of the first verb or the V1.
- The verbs in sequence can not be separated by a coordinating conjunction
- The second constituent is related in some way with its corresponding fullverb.

### 2.3.1. Auxiliary Constructions

To differentiate *compound verbs* from *auxiliary constructions*, it is necessary to look at the difference between *light verbs* and *auxiliary verbs*. Though light verbs are said to modulate the event encoded by the main verb in a manner that is quite different from the auxiliary verbs, there is no definition which clearly differentiates between the two. According to Butt (2003:4) "light verbs straddle the divide between the functional and lexical in that they are essentially lexical elements but do not predicate like main verbs." She further says that light verbs have the tendency to show a selectional restriction. She calls this as one of the hallmarks of light verbs. Dasgupta (1977a:75) says that it would be quite appropriate to call

vectors 'semi-auxiliary' verbs. For Gopalakrishnan and Abbi (1992), modal auxiliaries "shade off into explicators but it is not possible to state where the cut off point between the two lies." Butt and Lahiri (2003) argue that auxiliaries are grammaticalised element developed through historical processes, and they further changes into affixes, but light verbs are historically dead end. There are others like Fedson (1993:63) who says that auxiliaries are different from the light verb in that, "they (auxiliaries) contribute the same full meaning to the complex as it does when and if it can be used independently as a predicating verb."

None of the claims shown above clearly say as to where the exact line of demarcation between the light verb and the auxiliary verb lies. However, there are points on which everyone agrees, such as, auxiliaries freely occur without co-occurrence restriction, they either deviate completely from the verb from which they developed, or do not have an independent verb counterpart. In the light of these observations, I classify some of the verb sequences in Tenyidie as auxiliary verb constructions. The examples are given below.

```
(2) a. No puo ngu tuo
2SG 3SG see FUT
'You will see him.'
```

b. No puo ngu lho2SG 3SG see FUT.NEG'You will not see him.'

an event in the future – to the sentence.

Morphologically, the sequence *ngu tuo* in (2a) looks like a compound verb, but the verb *tuo* which is translated as 'will' does not qualify as a light verb. Like the auxiliaries in other languages, it freely occurs with all kinds of verbs and contributes the same meaning wherever it occurs. There is a homophonous form *tuo* 'walk/leave' which occurs as the main, but *tuo* in (2a) cannot be said to have developed from *tuo* 'walk/leave' since the two verbs do not have any sense in common. *lho* 'will not' in (2b) does not occur as an independent verb elsewhere, and in all of its occurrences, it invariably adds a negative sense – either of a prediction or of

The other verbs which I put under the category of auxiliary verb are; *morosuo* in (3a) which is translated as 'should', and its negative counterpart *suo* 'should not' in (3b); *lievi* in (4a) which is translated as 'can', and its negative counterpart *lielho* 'cannot' in (4b).

- (3) a. No vo morosuo.

  2SG go should

  'You should go.'
  - b. No vo suo.2SG go should not 'You should not go.'
- (4) a. A chü lievi.

  1SG do can

  'I can do (it).'
  - b. A chü lielho.1SG do cannot'I cannot do (it).'

The word *morosuo* in (3a) is composed of three identifiable morphemes; *mo* 'not', *ro* 'if' and *suo* 'bad'. When they are put together, they roughly mean 'if not, bad'. Here one can say that they are grammaticalised and function together as one functional word equivalent to 'should'. As a single word, it occurs in elliptical sentences such as *puo*<sub>1</sub> *mo-ro-suo*<sub>2</sub> 'he<sub>1</sub> should<sub>2</sub> (be the one to do the job).' However, in all of its occurrences, it contributes the same meaning, like any other auxiliaries and therefore it cannot be called as a light verb.

The word *suo* literally means 'bad', and it occurs as the main predicative element in copular sentences such as *puo*<sub>1</sub> *computer*<sub>2</sub> *suo te*<sub>3</sub> 'his<sub>1</sub> computer<sub>2</sub> (went) bad<sub>3</sub> or broke'. In (3b) it is used as a negative counterpart of *morosuo* 'should', that is, it serves as a negative operator that takes a sentential scope. Here it functions purely as a negative morpheme rather than modify or regulate the main verb, and therefore cannot be called as a light verb.

*lievi* in (4a) which is translated as 'can' also compose of two identifiable parts; *lie* 'take' and *vi* 'good'. Like *morosuo* 'should', this verb also conveys the same meaning wherever it occurs. This again separates it from other light verbs in the language. *lielho* 'cannot' in (4b), which occurs as the negative counterpart of *lie-vi*, occurs as a sentential negative. In all of their occurrences, the auxiliaries shown above carry the same meaning and occur without any co-occurrence restrictions.

There are others like *ya*, *wa* and *te* which do not occur as an independent verb elsewhere. I call them clitics, because they can all be used as phrasal affix like the possessive marker ('s) in English. *ya* in (5) indicates habitual aspect, *wa* in (6) indicates the completion of the event denoted by the main verb, and *te* in (7) is markers perfect aspect. These markers never occur as an independent verb in any context, and therefore do not qualify as light verbs<sup>7</sup>.

- (5) Puo rüzhü ya 3SG play HAB 'She plays.'
- (6) Puo america nu vo wa te 3SG america LOC go PFV PRF 'He had been to America.'
- (7) Puo ze te

  3SG sleep PRF

  'She slept.'

#### 2.3.2. Serial Verb Constructions.

Baker and Harvey (2010) observed that the term 'serial verb' is used for a wide variety of constructions with many kinds of semantic structures involved. Foley (2010) also says that serial verb constructions are in no sense a unified phenomenon, but manifest different structural realisations and express diverse types of event structure, some as simple as a coverb constructions and some more complex. In the literature on serial verb construction, one encounters many verb sequences which look like compound verbs. For instance, Pandharipande (1993) calls *karun ghene* in Marathi as serial verb construction. The construction means 'to do for oneself' where *karun* 'do' (literally having done) conveys the primary meaning, and *ghene* 'take' conveys the adverbial meaning (see also Kachru 1993). In languages like Hindi and Bangla, constructions such as these are called as compound verbs.

Bámgbóşé (1974) divides serial verbs in the West African languages into two types: a *linking type* which are derived from two or more underlying sentences, and a *modifying type* 

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<sup>&</sup>lt;sup>7</sup> Butt (2003) says that every light verb has a main verb use. Svenonius (2008) calls this as *Butt's Generalization* 

which is derived from a single underlying sentence. The different interpretations of the following sentence represent the two different types of serial verb constructions.

```
(8) Qmo náà ké wáchild the cried come'The child came crying' (Linking type)'The child suddenly cried' (Modifying type)
```

On the different readings of (8), Bámgbósé (1974) says that the verb  $w\acute{a}$  'come' in the first reading retains its primary meaning. He calls these kinds of serialized constructions as the linking type. In the second reading, the verb  $w\acute{a}$  modifies the main verb by adding a sense of suddenness, and he calls this type of serial verb constructions as the modifying type.

Jayaseelan (2004) also hints at the possibility of dividing serial verb constructions in Malayalam into two classes: one in which all the verbs have their primary meanings and can have their own arguments, and the other in which all but the first verb are light verbs (VP serialization and V serialization). However, due to the presence of some "in between" cases, he says that it is not possible to make a neat division between the different constructions. The constructions which Bámgbóşé (1974) and Jayaseelan (2004) call as the *modifying type* and *V serialization* respectively, correspond to what are described in the literature as compound verb constructions.

In Tenyidie too, different verb sequences display different properties. In some sequences, the second verb functions as a light verb, and in some others both the verbs retain their primary meanings. I group the verb sequences into *compound verb constructions* and *serial verb constructions* despite the difficulty in specifying to what extent a verb is grammaticalised. Just as a person can "validly speak of day and night without denying that twilight exists" (Dasgupta 1977b), the demarcation does not preclude or deny the existence of 'in between' cases.

In the following examples, the verbs in sequence belong to the same clause but none of them is grammaticalised or reduced semantically. Example (9a) describes a situation where the act of preparing and drinking are seen as a single event. Here both the verbs retain their primary meaning. Similarly, (9b) describes an act of entering into a kitchen dancing where the second verb *le* 'enter' takes a PP complement *mhachaki nu* 'to the kitchen' even

though it occurs in the V2 position. In (9c) the verb *pie* 'take/hold'<sup>8</sup> is partly grammaticalised but it governs a complement of its own, therefore it cannot be called as a light verb and the verb sequence cannot be called as a compound verb.

- (9) a. Hieko ca chü kre
  1PL tea make drink
  'We made and drank tea'
  - b. Ppuo mhachaki nu nashü le te
     3SG kitchen in dance enter PRF
     'She went into the kitchen dancing'
  - c. Puo kotari pie nhasi u phro shü

    3SG knife hold fruit DET cut put

    'He cut the fruit with knife'

The distinction between compound verb and serial verb lies essentially in whether the second verb is a full verb or a light verb since compound verbs obligatorily have a light verb in the V2 position. In all the examples above, the second verb does not function as a functional element or is in any way reduced. Tenyidie has a lot of this kind of constructions; however they are excluded from this chapter as they do not qualify as compound verb constructions. They are described in detail in Chapter 4 under the title *Serial Verb Constructions*.

# 2.3.3. Compound Verb Constructions

Many of the Indian languages abound in compound verb constructions, and one sees a lot of similarities between these languages especially in the choice of light verb, and the meaning it conveys. For instance, in both (10) and (11) the second verb which translates as 'take' indicates self-benefaction – the first example is from Abbi and Gopalakrishnan 1991 and the second one is from Paul 2004.

(10) ek kamiz silvaa lo
one shirt get.tailored TAKE-imp
'Get a shirt made (for self)'
(Abbi and Gopalakrishnan 1991:691)

<sup>&</sup>lt;sup>8</sup> Pie can mean 'take' or 'hold'. Here, I will gloss it as 'hold'.

(11) ritu khabar khe-e ni-lo
ritu meal eat-cp take-3pt

'Ritu took (her) meal (implying that Ritu is self-beneficiary) (Paul 2004:4)

A lot of constructions in Tenyidie look like compounds verbs in other languages like Hindi, Bangla, and Telugu. Using (12) – (14) as examples, I show that the language has compound verb construction. The sentences exhibit all the features of compound verbs mentioned above. They represent three different types of compound verbs found in Tenyidie. Example (12) represents the type of compound where the light signals the orientation of the action – for whom the action is done. Example (13) represents those compounds where the light verb introduces meaning related to inception and extendedness, and (14) represents those compounds where the light verb adds a sense related to the posture it describes, and also indicates that the action or the event encoded by the main verb is in a continuous state.

- (12) Neizo leshü puo khrü lie.

  neizo book one buy take

  'Neizo bought a book (for himself).'
- (13) Pele ze le te pele sleep enter/go PRF 'Pele began to sleep'
- (14) Khrielie ta tuo.

  khrielie run walk/leave

  'Khrielie was running.'

In (12), *khrü* 'buy' and *lie* 'take' function as one predicating unit, and the sentence simply means 'Nizo bought a book for himself.' There is only one main verb. The V1 or the first verb *khrü* 'buy' provides the main predicational element. The second verb *lie* 'take' adds a sense of self-benefaction to the sentence. Like light verbs in other languages, it (*lie* 'take') occurs as the main verb in contexts like (15a) where it appears with all the formal trappings of an independent verb. In a compound, however, it does not retain its primary lexical meaning and therefore does not take adverbial modifier independent of the main verb. This is shown by the ungrammaticality of (15b). The sequence *khrü lie* functions as one functional-semantic unit and therefore they resist separation by coordinating conjuncts as shown in (15c).

- (15) a. A a zeu ki priesa lie lie te

  1SG 1SG friend ABL money take take PRF

  'I have taken money from my friend'
  - b. \*Nizo leshü puo khrü lie mha tenizo book one buy take quickly PRF
  - c. \*Nizo leshü puo khrü di lie. nizo book one buy <sup>CP</sup> take

The verb sequence *ze le* 'sleep enter' in (13) also exhibits all the features of a compound verb construction. The verb *le* 'enter' here indicates the inception of the situation described by the main verb. As an independent verb, *le* 'enter' describes an act of entering into a place, and it takes a PP complement as in (16a), but as a light verb in a compound, it is stripped of its ability to govern a complement of its own; therefore (16b) is ungrammatical. Like other compound verb constructions, the sequence *ze le* 'sleep enter' cannot be separated by any coordinating conjunct as shown in (16c).

- (16) a. Puo mhachaki nu le te.

  3SG kitchen LOC enter PRF

  'She went to kitchen.'
  - b. \*Puo thezhübou nu ze le te.
     3SG room LOC sleep enter PRF
     'She has started to sleep in the room.'
  - c. \*Puo ze di le te.

    3SG sleep CP enter PRF

    'She slept and entered.'

The verb sequence *ta tuo* 'run walk/leave' in (14) represents the third type of compound verb construction in Tenyidie. As shown in (17a), *tuo* 'walk/leave' can occur as an independent verb to mean 'walk' or 'leave'. When it occurs in a compound, it indicates two different kinds of information: that the action encoded by the main verb is ongoing, and the people or the entity involved is in motion. In (14), *tuo* 'walk/leave' not only indicates that Khrielie is running, but it implies that he is running from one place to another as opposed to

running in a place like a playground or inside a hall. In (17b), *tuo* 'walk' takes an adverbial modifier because it occurs as an independent verb, but in (17c), the modifier is not permitted because, like any other light verb, it no longer enjoys the privilege of being modifiable or complementable independently.

```
(17) a. Puo tuo te.

3SG leave PFT

'She left.'
```

- b. Menuo di tuo lie.careful CP walk IMP'Walk carefully.'
- c. \*khrielie ta menuo di tuo.

  khrielie run careful CP walk/leave

Another proof which shows that the verb sequences in (12-14) are compound verbs, comes from the negation test. Since compound verbs describe what are conceptualised as a single event, they do not allow double negation. This is shown in the examples below.

```
(18) a. *Neizo leshü puo khrü mo lie. mo
neizo book one buy NEG take NEG
```

```
b. *Puo ze mo le mo
3SG sleep NEG enter NEG
```

```
c. *Khrielie ta mo tuo mo.

khrielie run NEG walk/leave NEG
```

Looking at the illustration provided here one can say that none of the verb sequences – *khrü lie* 'buy take', *ze le* 'sleep enter', and *ta tuo* 'run walk/leave' – express two separate events. They all function as 'one functional-semantic unit' describing a single unified concept, where the lexical meaning of the first verb forms the semantic core and the second verb adds a semantic nuance to the construction.

The bond between member-verbs of a compound in languages like Hindi and Marathi is tight; therefore they resist separation by adverbial modifiers (Butt 1995, Pandharipande

1993). But in some languages, separation is not completely prohibited. Paul (2004) shows that in Bangla the different constituents allow other element to intervene as in (19). Compound verbs in Tenyidie also allow adverbial modifier in between, giving rise to a discontinuous compound as shown (20).

- (19) eš-e jokhon por-echo thek-e ja-o come-cp when fall-2 pr pft stay-cp go-2pr-imp 'Now that you have come, stay back.'
- (20) Khrielie ta vise tuo. khrielie run well walk/leave 'Khrielie was running fast.'

Languages differ in the use of compound verb constructions, that is, some languages have more compound verbs than others. It is said that among the Indo-Aryan languages, the attestation of the compound verb is most frequent in Hindi-Urdu while it is very rare in Kashmiri (Paul 2004). In Tenyidie, compound verbs occur quite frequently, and more than a dozen appear as light verbs. The following are the verbs which appear as light verb in Tenyidie:

lie 'take', shü 'put/keep', kho 'go up', ker 'come down', pa 'go up', ler 'come down', phi 'go straight', phir 'come straight', ke 'go down', khor 'come up', le 'enter', par 'come out', vo 'go', vor 'come', ba 'sit', tha 'stand', zhü 'lie' tuo 'walk/leave'.

As Goldberg (2003:11) observed, "if the light verb were truly semantically vacuous, with the host supplying all of the semantics, one might expect that there would be only one or two light verbs." The presence of a large number of light verbs implies that they are more than functional words. In the following section, I show what the different light verbs contribute in Tenyidie.

## 2.4. Specific Contribution of the Different Light Verbs

Gopalakrishnan and Abbi (1992:28) observed that light verb "systematically contributes specific shades of meaning to the main verb that it would not indicate outside." According to Butt (2010), the lexical semantic specifications of many of the light verbs are so general that they can be used in a multitude of contexts, that is, they fit in many constellations. For Paul (2004:79) the semantics of V2s profile the base in the following ways:

- (i) By highlighting the manner of involvement of the participant(s) engaged in the base-event,
- (ii) By imposing temporal and aspectual semantics on the event denoted by the resultant CV predicate; information related to duration, modality and aspects like perfectivity and imperfectivity, inception and inchoation.

Even though it is not always possible to precisely say what a particular light verb contributes, as in other languages, light verbs in Tenyidie generally regulate the situation or event encoded by the main verb by providing information related to the beneficiary of the action, inception and inchoation, extension and duration, posture and location, and other semantic nuances. Base on the types of information they provide, I group them into three different types. They are described below.

## 2.4.1. Type I: Benefactive Verbs

I call the verbs that come under the first type as benefactive verbs because they indicate for whom the action is done or performed. There are only two verbs in this type and they behave much like the Hindi-Urdu explicators *le* 'take' and *de* 'give' which show the meaning of 'self-benefactive' and 'others benefactive' respectively in some cases and that of perfectivity in others (Abbi and Gopalakrishnan 1991). The verbs are *lie* 'take', and *shii* 'put'.

### 2.4.1.1. *lie* 'take'

As an independent or the main verb in a sentence, lie 'take' occurs in several different contexts. If we look at the English translation of the examples (21a) - (21c) below, the verb seems to show different senses. However, in all the sentences, there is a related core meaning

- the meaning 'to take' or 'to receive'. In all the examples, there is a sense of acquiring or obtaining something by the subject – 'take money' in (21a), 'marry' in (21b) also means take a woman<sup>9</sup>, and 'buy meat' in (21c) also has a sense of taking or receiving by the subject. As a lexical verb, it always has the extra low tone (") in all of its occurrence.

```
(21) a. A a zeu ki priesa liè liè te.

1SG 1SG friend from money take take PFT

'I received/took the money from my friend.'
```

- b. Puo thenu lië mo.3SG woman marry NEG'He did not marry.'
- c. Puo hanu nu themuo lië ya.3SG here from meat buy HAB'She buys meat from here.'

This verb is also used to mark an imperative mood as in (22a) and (22b). Here, however, the verb completely loses its sense of 'take' or 'receive'. It also changes its tone depending on the tone of the preceding word<sup>10</sup>.

```
(22) a. Hanu vőr liề. here come IMP 'Come here.'
```

b. Lunu pà liè.there go IMP'Go there.'

When *lie* 'take' occurs in a compound as the light verb, its sense of receiving or taking is not fully retained, but it indicates that the action is done for the benefit of the doer. It adds a sense of self-benefaction to the sentence. The events encoded by the compound verbs *chü lie* in (23a) and *do lie* in (23b) have the sense that the actor is the beneficiary of the thing accomplished. As an element in a compound, it changes its tone like it does in (22).

When the preceding word has an extra high tone (´), *lie* takes an extra low tone (``) In other contexts, it takes a low tone (``).

 $<sup>^9</sup>$  lie is a 'male chauvinist' term for the verb 'marry', which selects only male noun as subject and female noun as objects

- (23) a. Puo ki puo chú liề.

  3SG house one build take

  'She built a house (for herself).'
  - b. Puo pfe puo dò liè.3SG shawl one weave take'She weaved a shawl (for herself).'

## 2.4.1.2. shü 'put'

The other verb that occurs under the first type is the verb *shü*. When this verb occurs as an independent verb, it means 'fill', or 'put/keep' as shown in (24) below.

- (24) a. A a hie shü lie tuo.

  1SG 1SG cup fill take FUT

  'I will fill my cup.'
  - b. Leshü u pie n likho nu shü lie.
     book DET hold 2SG bag LOC put IMP
     'Put the book inside your bag.'

Like the verb *peTTu* 'put' or 'keep' in Telugu, *dena* 'give' in Hindi, and *deoa* 'give' in Bangla, *shü* 'put' indicates that the action is done for someone other than the doer of the action when it occurs in a compound verb construction. In both (25a) and (25b), there is an unspecified person who is the recipient or the beneficiary of the action.

- (25) a. Puo ki puo chü shü.

  3SG house one build put

  'He built a house (for others).'
  - b. Puo pfe puo do shü.3SG shawl one weave put'She weaved a shawl (for others).'

## 2.4.1.3. *lie* 'take' and *shü* 'put' as Perfective Aspect Markers

Besides the functions described above, *lie* 'take' and *shü* 'put' act as perfective aspect markers, that is, a predicate gets a perfective viewpoint when any of these verbs combines with another verb. To illustrate this point, I present the perfective imperfective contrast in Tenyidie in the light of some of the views and observations found in the literature on perfectivity.

Dahl (1985) observed that there is a category (language-specific) which is treated as an instance of the past but restricted only to an imperfective context. In Slavic aspectology for instance, a simple denotative or the imperfective aspect is used in a context where "there is no specific reference to the completeness of the event" and "the speaker is simply interested in expressing the bare fact that a particular event did take place, without any further implications." This aspect is used when the action itself—rather than its result—is relevant.

As in the Slavic aspectology, the bare verb or the unmarked verb form in Tenyidie gives only a simple denotative meaning; that a particular event took place without any implication of progressive or habitual meaning or any specific reference with regard to the completion of an action or event. Examples (26a) and (26b) can be said to have an imperfective viewpoint as one gets a sense that the activities described by the verbs took place but there is no further detail, either of the completion or of the continuation of the events. The final end point of the event is not linguistically presented.

```
(26) a. Puo sibo u wi.

3SG tree DET cut

'He cut the tree.'
```

```
b. Puo kikha u khrü.3SG door DET open'She opened the door.'
```

The claim that the above sentences have an imperfective viewpoint is supported by the fact that they are compatible with the assertion of non-completion in the subordinate clause shown in (27a) and (27b).

- (27) a. Puo sibo u wi deri wi lie mo te.

  3SG tree DET cut but cut take NEG PRF

  'He cut the tree but could not cut it (down).'
  - b. Puo kikha u khrü deri khrü lie mo te. DET **NEG** PRF door open but 3SG open take 'She opened the door but could not open.'

It is said that "telic sentences with perfective viewpoint presents complete events with initial and final endpoints", and they are incompatible with the assertion of non-completion. Thus 'Donald fixed the clock and is still fixing' and 'Mary opened the door, but she did not get it open' are incompatible (Smith 1999:487). When verbs like *wi* 'cut' and *khrü* 'open' combine with *lie* 'take' or *shü* 'put' as in (28a) and (29a), the compound verbs denote complete events or bounded situations. As perfective sentences, they are incompatible with the assertion of non-completion as shown in (28b) and (29b),

- (28) a. Puo sibo puo wi lie.

  3SG tree one cut take

  'He cut a tree.'
  - \*Puo sibo b. puo wi lie derei wi lie mo te. **NEG PRF** 3SG tree one cut take but cut take 'He cut a tree but could not cut it.'
- (29) a. Puo kikha u khrü shü.

  3SG door DET open put

  'She opened the door.'
  - \*Puo kikha u khrü shü deri khrü lie mo te. **PRF** 3SG DET open put but NEG door open take 'She opened the door but could not open.'

Perfective sentences according to Dahl (1985) present an event or an activity as a bounded situation. According to Comrie (1976), they present a situation as a single whole. For Smith (1999), the span of the perfective includes the initial and final endpoint of a situation: it is closed informationally, and the events are taken as terminated or completed depending on the

situation types of the sentences. She further says that *perfective event* sentences present achievements and accomplishments in their entirety as discrete events, and *perfective activity* sentences present a situation as a temporal unit, or segment.

When *lie* 'take' and *shü* 'put' combine with achievement or accomplishment verbs, they describe situations that have a heterogeneous part structure with an end point, and there is no entailment from part to whole, and the progressive gives rise to the imperfective paradox (Rothstein 2008). In the examples given below, (30a) entails (30b) because the latter is unspecified with regard to perfectivity, but since (30c) means that the end point is reached, the imperfect sentence in (30a) does not entail it. As telic predicates, constructions with *lie* 'take' and *shü* 'put' freely occur with *in*  $\alpha$  *time* adverbial expression. This is shown in (30d).

- (30) a. Puo sibo u wi ba

  3SG tree DET cut CONT

  'She is cutting the tree.'
  - b. Puo sibo u wi3SG tree DET cut'He cut the tree.'
  - c. Puo sibo u wi lie

    3SG tree DET cut take

    'She cut the tree.'
  - d. Puo bavüdo puo donu sibo u wi lie te 3SG hour one within tree DET cut take PRF 'He cut the tree within one hour.'

According to Smith (1999), sentences with perfective activity present an activity as a temporal unit, but not necessarily as terminated. They present an implicitly bounded segment of an activity, but the implicit bound need not coincide with the termination of the activity. However, if the situation continues after the implicit bound, the continuation constitutes another temporal unit. When *lie* 'take' or *shü* 'put' occurs with activity verbs, they present a situation as a temporal unit or segment with an implicit bound. Example (31) implies that the activity described by the main verb ended as expected and not arbitrarily.

(31) Puo nashü shü
3SG dance put
'She danced'

Like the activity verbs, the semelfactive verbs such as 'cough', 'skip', 'jump', 'clap', 'knock', and 'blink' describe an unbounded activity when they occur alone, that is, they present the situation as incomplete. But when they collocate with any of the light verbs, the implicit bound becomes visible. Both (32a) and (32b) mean the person clapped, but in the latter, there is a sense of completion which the former does not have.

```
(32) a. Puo dzeda.

3SG clap

'She clapped.'
```

b. Puo dzeda shü.3SG clap put'She clapped.'

Singh (1990) says that in Hindi, compound verbs cannot be used in referring to the state predicates such as *wo lambaa hai* 'he is tall' because states do not have endpoint, but when a V2 is added to such a predicate, as in *Wo lambaa hone lagaa* 'he started to become tall', or *wo lambaa ho gaya* 'he became tall', the end point becomes visible. He says that V2s in such constructions indicate a change into a particular state or a change out of a state. In Tenyidie too, the verb *shü* 'put or *lie* 'take' do not occur in state predicates such as (33a) and (34a), but when they occur with stative verbs as in (33b) and (34b), it gives rise to an inchoative situation. The compound verbs in these examples describe a change of state. Here it can be said that a different kind of 'aktionsart' is formed as a result of the state verbs' interaction with *shü* 'put and *lie* 'take' (Butt and Ramchand 2005).

(33) a. A puo si ba.

1SG 3SG know sit

'I know him.'

-

<sup>&</sup>lt;sup>11</sup> As Croft (2005) observed, a verb does not inherently belong to a particular aspectual type but has the potential to be conceptualized or to be construed in multiple aspectual types.

- b. A puo si lie.1SG 3SG know take'I came to know him/I understood him.'
- (34) a. A leshü u ngu ba.

  1SG book DET see sit

  'I see the book.'
  - b. A leshü u ngu shü.1SG book DET see put'I found the book.'

The extent to which the light verbs are grammaticalised varies. While some of them have almost the full independent meaning, some have their lexical meaning almost entirely bleached and function more like other functional elements. Looking at the examples shown above, one can say that *lie* 'take' and *shü* 'put' are considerably emptied of their lexical meaning when they occur in a compound verb constructions. No doubt, they retain part of their lexical meaning and contribute to the lexical content of the compound verb but the preponderance of their role as perfective markers makes it necessary for them to occur in all the perfective sentences. Therefore like the other auxiliary verbs, they occur without much co-occurrence restrictions.

# 2.4.2. Type II: Motion Verbs

Tenyidie uses ten different motion verbs to describe the different up and down, and back and forth movements<sup>12</sup>. Unlike the motion verbs like 'go' and 'come' in English, these verbs indicate the relative distance and the altitude between the different reference points. These verbs can also be called as *deictic verbs* because they can be used to indicate the spatial relationship alone in certain contexts. When they occur as light verbs in compound verb constructions, they add to the predicate meanings which they would not indicate outside the compound verb or elsewhere.

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<sup>&</sup>lt;sup>12</sup> It is said that "languages have richer verbal vocabularies in domains where their cultures make a more delicate distinctions between types of events and more impoverished one where there are fewer distinctions needed" (Durie 1997:321). The topography of the region speakers of Tenyidie inhabit being hilly and uneven, the language has a lot of verbs to refer to the upward and downward movement. These verbs help the speaker to be precise in giving the information.

In diagram 2.1, the ten different arrows represent ten different verbs used to describe the different up and down, back and forth movements. Point X is the centre and points A, B, C, and D are the different reference points. The direction of the arrows indicates the direction of the movements.

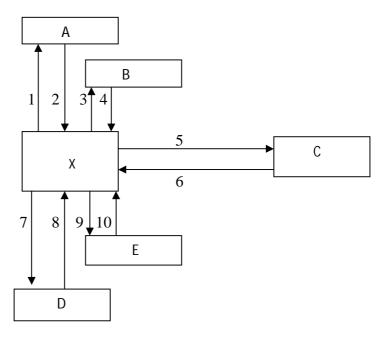


Diagram 2.1

Here I would like to mention that the proximal-distal distinction is conditioned by the context as there is no fixed distance which characterizes a particular distance as short or long. The meaning of the different verbs or the specific information each verb conveys is given below. The number in the parenthesis after the verb corresponds to the number of the arrow in the diagram.

- kho (1) 'upward movement away from the centre'
- ker (2) 'downward movement towards the centre'
- pa (3) 'short upward movement away from the centre'
- ler (4) 'short downward movement towards the centre'
- phi (5) 'movement away from the centre (same level movement as opposed to upward or downward movement)'

phir (6) 'movement towards the centre (same level movement as opposed to upward or downward movement)'

ke (7) 'downward movement away from the centre'

khor (8) 'upward movement towards the centre'

le (9) 'short downward movement way from the centre'

par (10) 'short upward movement towards the centre'

When these verbs occur in a compound verb construction, they add meaning related to *inception, inchoation, egression* and *extendedness* to the construction. The different environments in which the verbs appear, and the specific meaning each verb contributes in different contexts is given below.

## 2.4.2.1. *kho* 'go up'

When *kho* 'go up' occurs as the main verb in a sentence, it denotes an upward movement away from the deictic centre. As shown in the diagram, not all the upward or forward movements are described using this verb. The verb is used for a relatively longer movement, that is, when the distance between the two reference points is of a considerable length. For instance, in a ten storey building, movement from the base to the top floor would be described with the verb *kho* 'go up', but to describe a movement from one floor to the immediate next floor, a different verb would be used. Some of the contexts where this verb occurs are shown below.

- (35) a. Puo ki lha pesotho gei kho te.

  3SG house floor top LOC go PRF

  'She has gone to the top floor.'
  - b. Puo kijüthuo gei kho te.3SG mountain LOC go PFT'He has gone up to the mountain.'

As a pure deictic marker, it occurs in sentences like (36) to indicate the spatial relation between the two reference points. Here the verb specifies that the thing being referred is situated above the one with which it is compared and it is situated above/in front of the speaker

(36) Kho luu zivi kuo.
go that beautiful more
'That one is more beautiful.'

As light verb, *kho* 'go up' occurs with verbs such as *improve*, *increase*, *grow* etc. which describe a change from a lower to a higher level. In (37), it occurs as the light verb where it adds a sense of upward movement to the predicate. As the light verb, it no longer governs a complement of its own; as such, there is no locational complement in this sentence. The verbs in sequence function together as a unit, and they profile a unitary event.

(37) Puo vor ke-lie sie leshüki u vikehie se. kho te.

3SG come NOMZ-take after school DET improve EMP go PFT

'After she joined, the school has improved.'

#### 2.4.2.2. *ker* 'come down'

AS lexical verb, *ker* 'come down' describes the opposite movement of *kho* 'go up'. They are mutually contrastive in their denotation. As an independent verb, *kho* occurs in sentences like (38).

(38) Puo bu hanu ker lie.

3SG let here come IMP

'Let him come (down) here.'

It also occurs in sentences like (39) where it serves as a pure deictic marker.

(39) Puo tsü nunu ker puo mia ketso.

3SG head from come 3SG tail till

'From its head to its tail.'

Compound verbs with *ker* 'come' as its light verb denote a change in state as in (40). Like the English inchoative verb 'become/get', it acts as an inchoative verb here.

(40) Mha ma ko meyie ker te.thing price PLU cheap come PRF'The prices of the things have (come down) become cheap.'

## 2.4.2.3. *pa* 'go up/out'

Pa 'go up/out' conveys three related meaning as a lexical element. The different meanings are given in (41a - 41c). When it appears as a directional verb, it describes movement away from the deictic centre to another location which is at a higher altitude, but it is used for a relatively shorter distance. Both kho 'go up' and pa 'go up/out describe movement away from the deictic centre to a higher location, but as shown in diagram 2.1, they indicate different spatial extension. In (41a), the verb provided information about the distance between and the altitude of the two reference points. In (41b) the verb describes the movement of the bird out of an enclosure to an unspecified location. In (41c), it describes a slightly different event, that is, it describes the breaking of a dam, but even in this example, there is a sense of something moving away from a particular location.

- (41) a. Puo kimho gei pa te.

  3SG terrace LOC go PRF

  'She has gone up to the terrace.'
  - b. Pera u puo bou nunu pa te. bird DET 3SG cage from go PRF 'The bird has gone away from its cage.'
  - c. Dzüde u pa te.
    dam DET break PRF
    'The dam broke.'

As a light verb, it indicates an entry into a stage or state denoted by the main verb. Example (42) means Neiu is not really old but is getting old, and (43) means the flowers are getting faded. If one looks at the different situations from another angle, in both the examples, there is an *egressive* sense, which, according to Smith (1991), "spans the exit from an event". The first compound describes an exit from the youthful stage and the second compound describes an exit from the state of being in bloom.

- (42) Neiu rei phichü pa te.

  neiu also old go PFT

  'Neiu is also getting old.'
- (43) Nyiepu ko ra pa ta. zhie.

  flower PL fade go PRF PROG

  'The flowers have (almost) faded.'

#### 2.4.2.4. *ler* 'come down/enter'

As directional verbs *pa* 'go up/out' and *ler* 'come down/enter' describe two contrastive movements which are identical in length – one describes movement away from the deictic centre to a higher altitude, and the other describes movement towards the deictic centre which is generally at a lower altitude. In certain contexts, the verb also means 'enter' which do not have any sense of physical movement. In (44a), the verb implies that the speaker's house is situated below putuo's house, and the two houses are not far from each other. In (44b), the verb indicates a different kind of movement.

- (44) a. Putuo teisoduu a ki ler ya putuo every.morning 1SG house come HAB 'Putuo comes to my house every morning.'
  - b. Puo hieko kro nu ler te.3SG 1PL group LOC come PRF'She has come to/joined our group.'

When this verb occurs as a constituent in a compound, it describes an inception or the beginning of a situation denoted by the main verb. (45) refers to the onset of the night; that it is beginning to get dark. Without the verb *ler* 'come', the sentence would only mean that is it already night or dark. (46) is also about an onset of a situation. The compound verb describes the growing of leaves in spring when new leaves begin to bud greenly on trees.

(45) Tei zi ler te.

sky dark come PRF

'The dark/night has entered (It's getting dark).'

(46) Nha the ler ta zhie.

grass grow come PFT PROG

'Grass/leaves have begun to grow.'

## 2.4.2.5. *phi* 'go (same level)'

As motion verb, *phi* 'go (same level)' means to move to another location which is also at the same level. This is shown in (47a). (47b) does not describe a movement, but it indicates that the two ends of the rope are at the same level.

- (47) a. Hieko pe nunu phi ya.

  1PL bridge from go HAB

  'We go through the bridge.'
  - b. Kero u phi tso ba.
     rope DET go reach sit
     'The rope reaches the other end.'

Compound verbs with *phi* 'go' generally describe events which are already taking place and which will continue for some time in the future. In short, the verb *phi* 'go' in its capacity as light verb adds a sense of extension to the predicate. (48) means the two nations are in war and it will stretch into the future.

(48) Seyie nie puotie hou terhrü chü phi tuo.

nation DUAL time some war do go FUT

'The nations will be in war for some time.'

## 2.4.2.6. *phir* 'come (same level)'

The verb *phir* 'come (same level)' denotes movement towards the focal point from another location which is (or perceived to be) at the same level as the deictic centre, the reverse movement described by *phi* 'go (same level)'. It occurs in sentences like (49).

(49) Hieko pe nunu phir ya.

1PL bridge from come HAB

'We come from/through the bridge.'

The verb is also used in describing a situation which does not involve physical movement but has a sense of movement in time. In (50), the time of speaking serves as the reference point, and the event – the election, which is to be held sometime in the future – is considered as something moving towards the reference point.

(50) Tiecie huo sie dzeyhakelie u la phir tuo year some after election DET again come FUT 'Election will come again after some years'

In a compound, *phir* 'come (same level)' indicates that the event described by the main verb took place in the past and it continued for some time. In (51) *phir* adds a sense of continuation to the sentence. Without this verb, the sentence will mean 'the people played for three days' but the sense of continuation will be missing.

(51) Uko zha se ruzhü phir 3PL day three play come 'They played for three days.'

## 2.4.2.7. *ke* 'go down'

The verb *ke* 'go down' denotes a downward/backward movement away from the deictic centre. It also shows that the two reference points are not in close proximity. In (52), the verb indicates that the river is at some distance away from, and below the deictic centre – the point where neinuo started.

(52) Neinuo kerü nu ke te.

neinuo river in go(down) PRF

'Neinuo has gone to the river.'

As a constituent in a compound, *ke* indicates that the situation denoted by the first verb is finishing or is coming to an end. In (53), it adds a sense 'about to culminate' to the predicate. Without this verb, the sentence would only mean 'the sun has set.'

(53) Niaki le ke te sun set go(down) PRF

'The sun has almost set'

# 2.4.2.8. *khor* 'come up'

As a deictic marker, *khor* 'come up' occurs in sentences like (54a), and as a verb of motion, it occurs in sentences like (54b). In the former, it indicates that there are things located below the speaker's. In the latter, it implies that the speaker is calling a person who is at a lower altitude, and is at some distance away from him/her.

- (54) a. Khor hau a vie come this 1SG thing "This is mine"
  - b. No hanu khor lie2SG here come IMP'You come here.'

Unlike the verbs described above, *khor* 'come' does not seem to occur as light in a compound. There could be compound verb where it does, but I could not think of any such constructions.

# 2.4.2.9. le 'go down/enter'

In its deictic use, *le* 'go down/enter' denotes a point which is lower than, and not far from the deictic centre. In (55a), it indicates that the things referred are at some distance away from and below the speaker. When it occurs as motion verb, it describes movement away from the deictic centre to another nearby lower location. It also means 'enter' in contexts like (55b).

- (55) a. Le lu ko a vie.

  go/enter that PL 1SG thing

  'Those are mine.'
  - b. Puo kheho nu le.3SG pit LOC go/enter'She went into the pit.'

In a compound, *le* 'go down/enter' indicates the inception of an event, a change from one state to another. (56) means the plants /grasses have started to wither.

(56) Nha ko rüwi le te.

grass PLU wither go/enter PRF

'The grasses are getting withered.'

## 2.4.2.10. *par* 'come up/out'

As a base verb, *par* 'come out' or 'come up' describes a short outward or upward movement towards the deictic centre. In the diagram given above, it is indicated by the tenth arrow which represents movement from point E towards X. It occurs in sentences like (57). The sentence entails that Viu came out from a house/building.

(57) Viu kitie par.
viu outside come
'Viu came out.'

As a deictic marker, it occurs in sentences like (58). The sentence entails that there is a referent point different from the field the speaker claims as his/her field and that reference point is situated below the speaker's field as well as the speaker. The speaker could be standing in his or her field or above it.

(58) Par hau a lie.

come this <sup>1SG</sup> field

'This is my field.'

In a compound, *par* 'come up/out' profiles the inception of the event encoded by the main verb as in (59a) and (59b). In both sentences, it behaves like an inchoative verb.

- (59) a. Nyiepu u pu par ta zhie.

  flower DET bloom come out PRF PROG

  'The flower is beginning to bloom.'
  - b. Puo mirho par tuo.3SG open.eye come FUT'He will open his eyes.'

The other light verbs which belong to the same category are *vo* 'go' and *vor* 'come'. They are different from the ones described above in that they do not provide the *high/low* specification in their denotation. The verbs are described below.

#### 2.4.2.11. *vor* 'come'

Unlike the other motion verbs described above, *vor* 'come' does not provide any information about the level of the different reference points – whether the deictic centre is above or below the other reference point. The verb is used generally for long distance movements. In both (60a) and (60b), it indicates that the movement is towards the deictic centre but nothing is said about the other reference point.

- (60) a. Puo hanu vor.

  3SG here come

  'He came here.'
  - b. Puo leshüki nu vor.
     3SG school LOC come
     'She came to school.'

As a light verb, *vor* 'come' modifies the main verb in two different ways. In some contexts, "it expresses the idea that a situation which did not previously hold has actually come about, that there has been a change of state" (Crowley 2002: 78). In others, it indicates a habitual past, that is, the situation described by the main continued for some time in the past. In (61), *vor* 'come' indicates the inception of another state, and in (62) it indicates that event described by the main verb continued for some time in the past.

- (61) Kuonuo kra vor ta.

  kuonuo cry come PRF

  'Kuonuo began to cry.'
- (62) Puo zu kre vor.3SG wine drink come'He used to drink wine (he had the habit).'

## 2.4.2.12. vo 'go'

Like *vor* 'come', *vo* 'go' also does not provide information related to the levels of the different reference points. It indicates movement from the deictic centre to another location which is generally not close to the speaker. As a deictic marker, it occurs in sentences like (63a). Here it implies that the standard of comparison it closer to the speaker than the one with which it is compared. In (63b) the verb simply means the school is not close to the speaker.

- (63) a. Vo luu mesa kuo.

  go that clean more

  'That one is cleaner.'
  - b. Puo leshüki nu vo.3SG school LOC go'She went to school.'

As a modifying verb, it indicates that an event or an action encoded by the main verb is culminating. This is seen in the subtle difference between the sentences given below. As the translations show, (64a) means all the branches are dead/have died. In (64b), there is a sense that there still remain some branches which are not dead.

- (64) a. Puo co ko pete sia te.

  3SG branch PL all die PRF

  'All the branches are dead.'
  - b. Puo co ko pete sia vo te.

    3SG branch PL all die go PRF

    'All the branches are almost dead.'

Like the other light verbs, the verbs described in this section are also grammaticalized when they occur as a light verb, but their lexical meaning is largely retained. As such, they show more selectional restriction. Although many of them convey similar information, they are not in free variation. For instance, in *ra pa* 'fade go', *ze le* 'sleep go', *pu par* 'bloom come', and *mele vor* 'move come' the light verb indicates inception but they cannot be interchanged as they indicate inception of different kinds.

## 2.4.3. Type III. The postural Verbs

The verbs *sit*, *stand*, and *lie* describe three basic human postures. These postures play a significant role in carrying out the activities of daily lives. In many languages, these verbs are used as a common source for further semantic extension, that is, the different notions which form the conceptual basis of these verbs are extended to help conceptualize the position of an entity. In Manam, for instance, *soa?i* 'sit' and *eno* 'lie' indicate the posture of the entity or the thing referred, occur in locational predicates and existential predicates, occur as possession verbs and progressive aspect auxiliary and persistive aspect auxiliary (Newman 2002). In Mbay, the posture verbs have locational and existential usage. They also occur as progressive aspect marker (Keegan 2002).

Posture verbs are often associated with specific physical shapes. Notions such as a compact shape, a vertically elongated position, and a horizontally elongated position are associated with the sitting, standing, and lying postures respectively. As sources of semantic extension, notions which form the conceptual basis of these verbs, and other experiential realities which underlie them are extended to the encoding of the spatial position of entities. Here one is reminded of Newman and Rice who say "experiential realities can sometimes, be understood as motivating the linguistic facts" (Newman 2002:21), and "grammar is informed by cognition, and cognition is informed by everyday human experience" (Rice (2002:64).

As Newman (2002) commented, not every language makes use of these verbs to the same extent. Languages differ in employing the semantic extension. In English, for instance, we see an extension of the verb meaning 'sit', 'stand' and 'lie' to non-human referents in sentences like 'The computer sits on the table', 'The house stands on private property' and 'Her clothes are lying on the floor.' In Korean, the verb 'stand' is extended to encode the spatial position of animate as well as inanimate entities, but 'sit' and 'lie' are extendable only to encode the spatial position of animate entities (Song 2002). In Manam, it is said that *soa?i* 'sit' is extended to "express the progressive aspect without any trace of the postural meaning" (Newman 2002:14). In Diyari, posture verb *ngama*- 'sit' participates in a compound verb construction and it indicates that the action of the main verb is carried out in a stationary position (Austin 1998). This is possible because, experientially, it is possible to maintain a standing, sitting and lying postures while engaged in different activities.

Postural verbs in Tenyidie also serve as rich sources of semantic extension. As independent verbs, they describe different postures, occur in possessive sentences, locative sentences, and in stative predicates like  $a_1 puo_2 si_3 ba_4$  'I<sub>1</sub> him<sub>2</sub> know<sub>3</sub> sit<sub>4</sub>' (I know him). When these verbs occur in a compound verb construction, they add senses which are in some way related to the postures they described. Besides that, they also act as a continuous aspect marker. Their detailed description is given below.<sup>13</sup>

## 2.4.3.1. *ba* 'sit'

The verb ba 'sit' occurs in many different contexts, carrying different yet related meaning. In some contexts, the core postural sense is either not retained or not emphasized. In some, it is retained but in a lesser degree because it is considered less relevant. In all of its occurrences, however, there is a sense which is in some way related to the sitting position. In (65a), it denotes that Neinuo is in a sitting posture. In (65b), it expresses locative meaning. In this sentences, the notion of 'being on something' is extended to a non-human referent, but the postural sense of resting on one's buttocks is rendered irrelevant.

- (65) a. Neinuo bara u gei ba.

  neinuo chair DET LOC sit

  'Neinuo is sitting on the chair.'
  - b. Leshü u mizhü gei ba.
     book DET table LOC sit
     'The book is on the table.'

As in Moari (Newman 2002), *ba* 'sit' is also used to translate 'to stay' as in (66). Here the positional aspect is not retained, but the notion of being at a place is clearly conveyed. There is also a sense of rest and relaxation – associated with the sitting posture – in this sentence.

(66) A thie ba ta tuo

1SG today sit PFT FUT

'I will stay today.'

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<sup>&</sup>lt;sup>13</sup> The verb *tuo* 'walk/leave' behaves like the postural verbs in acquiring an extended meaning when it occurs in different contexts. I therefore treat it like one of the posture verbs here.

In (67), it expresses existential meaning. The postural sense is not so strongly emphasized, and though the sentence would be most felicitous if the referents are in a sitting position, it would be acceptable even when it is not clear whether the referents are in a standing or sitting position.

(67) Uko mia se ba
3PL people three sit
'There are three of them.'

In (68), ba 'sit' indicates possession.

(68) A nyarübou puo ba.

1SG violin one sit

'I have a violin.'

When *ba* 'sit' occurs in a compound, as mentioned earlier, it adds a sense related to the sitting posture, and also shows that the activity or the event described by the main verb is in a continuous state. In contexts like (69), the construction gets a meaning *sit verbing*, that is, one gets the impression that the person is sitting and reading. In (70a), *ba* 'sit' modifies the main verb in a different way. Besides indicating that the activity is ongoing, it shows that the activity is taking place in a particular location. The sentence can be said of a person running in a playground. This point becomes clear when *ba* is replaced with another verb as in (70b). The difference between (70a) and (70b) is 'running in a particular place' and 'running from one place to another', where the senses of 'being in a particular place' and 'moving from one place to another' come from the verb *bat* 'sit' and *tuo* 'walk/leave'. These examples clearly indicate that the *ba* 'sit' and *tuo* 'walk/leave' are not fully grammaticalised when they occur as light verbs.

- (69) Puo leshü puo phrü ba.

  1SG book one read sit

  'He is reading a book.'
- (70) a. Puo ta ba.

  3SG run sit

  'He is running.'

b. Puo ta tuo3SG run walk'She is running.'

In Mbay, the verb *ndi* 'sit' has the predominant place among the postural verbs, and it is "found in cases where it is not clear that the subject is seated, or even where it is clear that the subject is not seated" (Keegan 2002:347). In Tenyidie too, *ba* 'sit' is the most frequently used of all the posture verbs. If one considers examples like (70a), one sees the verb occurring even in situations where the person performing the action is not in a sitting posture. In all of its occurrence, however, it always adds to the predicate a sense which is in some way related to its lexical meaning.

### 2.4.3.2. *tha* 'stand'

Like *ba* 'sit', *tha* 'stand' also occurs in several different contexts. In (71a), it describes the standing posture. In (71b), it means 'stop', and in (71c) it occurs as locational verb. In (71d) it indicates possession.

- (71) a. No hanu tha lie.

  2SG here stand IMP

  'You stand here.'
  - b. Gari u tha mo te.vehicle DET stop NEG PRF'The vehicle did not stop.'
  - c. Rüngu u kikha sie tha.
     spear DET door behind stand
     'The spear is (stands) behind the door.'
  - d. Niu mithu pengu tha.niu cow five stand'Niu has five cows.'

In all these examples, the posture sense is extended in some way to help conceptualize and describe the different entities and situations. In (71c), for instance, the verb indicates that the

spear is in a vertical position. If the locational phrase 'behind the door' is replaced with another phrase like 'under the bed', the sentence would have  $zh\ddot{u}$  'lie down' instead of tha 'stand' to mean 'the spear is (lies) under the bed.' In (71d), where the verb tha 'stand' indicates possession, the semantic extension is based on the possibility of the possessed to stand on legs – the active body part associated with the standing posture.

In Ngan'gityemerri, it is said that "anything that is either raised above the ground on legs, or leg-like supports, or is conceived of as having significantly greater height than breadth, is said to 'stand" (Reid 2002:246). In Tenyidie, the elongated objects and animate things that walk on legs 'stand', but not everything that is raised above the ground on legs or leg-like supports. Thus for a sentence like 'there is a table in the kitchen', the verb ba 'sit' and not tha 'stand' is used as in (72)

(72) Mizhü puo mhachaki nu ba/\*tha table one kitchen in sit/\*stand 'There is a table in the kitchen.'

When *tha* 'stand' occurs in a compound, it indicates that the activity described by the main verb is continuing. Besides that, it also suggests that the actor could be in a standing posture while engaged in the activity described, or the activity or the event is going to be brief<sup>14</sup>. Both (73a) and (73b) describe a situation where the act of waiting is continuing, but there is a slight difference between the two. (73a) would be most felicitous if the speaker stands and wait, knowing or in the expectation that the wait would not be long, and (73b) would be most apt for a situation where the waiter sits and waits or when the act of waiting is likely to be long.

(73) a. A puo pfe tha.

1SG 3SG wait stand

'I am waiting for him.'

b. A puo pfe ba.1SG 3SG wait sit'I am waiting for him.'

<sup>&</sup>lt;sup>14</sup> Newman (2002) ascribes the sense of impermanence/ shortness in the aspectual extension of 'stand' to the experiential reality whereby the standing position for humans is the most difficult to maintain over long periods.

The verb *tha* 'stand' occurs with different kinds of verbs in several different contexts, and it is difficult sometimes to point out exactly what it contributes. However, in most cases, the sense of standing and acting, or that the action is going to be brief is implied whenever this verb occurs as the light verb in a compound.

# 2.4.3.3. *zhü* 'lie down'

Like the other posture verbs,  $zh\ddot{u}$  'lie' also expresses different meaning when it occurs as an independent verb. In (74a) it expresses the posture meaning. In (74b), the verb expresses the existential meaning, and in (74c), it occurs as a locative verb.

- (74) a. No hanu zhü lie.

  2SG here lie IMP

  'You lie down here.'
  - Kerü kezha nu khuo kezha zhü ya
     river big in fish big lie HAB
     'There are big fishes in big rivers.'
  - c. Puo rako ko pete bank nu zhü te.

    3SG money PL all bank in lie PRF

    'All his money is in the bank.'

In a compound verb construction,  $zh\ddot{u}$  'lie' acts as a continuous aspect marker and also provide information about the spatial orientation of an entity - that something long is positioned horizontally. In (75a), the main verb itself indicates that the person is in a lying posture, therefore choosing  $zh\ddot{u}$  as a marker of continuous aspect is as expected. In (75b), it can be said that  $zh\ddot{u}$  'lie' is chosen over other postural verbs because a flowing water can be viewed as an elongated object lying in a horizontal position.

(75) a. Puo zhü zhü 3SG lie lie 'He is lying.'

 Kerü lunu dzü kemesa kru zhü tuo river there water clean flow lie FUT 'Clean water will be flowing in that river.'

When a person sleeps, he or she is generally in a lying position. However, that is not the only posture one takes. One can be in a sitting posture or even stand and lean on something and sleep. Therefore when one describes an ongoing act of sleeping, the different posture verbs are chosen depending on the context. Even though *ze zhü* 'sleep lie' in (76a) is the most commonly heard expression because of the close association between lying and sleeping, one can say (76b) to refer to a person who is asleep and is in a sitting position. If a person is in motion, say a moving car, and is asleep, (76c) will be used to describe the situation.

- (76) a. Puo ze zhü te.

  3SG sleep lie PRF

  'She is sleeping.'
  - b. Puo ze ba te3SG sleep sit PRF'He is sleeping.'
  - c. Puo ze tuo te3SG sleep walk/leave PRF'She is sleeping.'

Dasgupta (1977a) says that in combinations like *bhebe mOra* 'to think-and die', "one sees much more of the full verb, independent meaning of the vector verb than the common observations on the meaning of vector verb would lead one to expect." A similar thing can be said of the compound verbs in (76a) to (76c) because, in all these sentences, there is a strong presence of the posture meaning.

#### 2.4.3.4. *tuo* 'walk/leave'

As mentioned earlier, *tuo* 'walk/leave' is also used as a rich source of semantic extension. Like the postural verbs described above, it also occurs in different contexts. As an independent verb, it occurs in sentences like (77a) and (77b).

- (77) a. Zhau tuo te.
  zhau leave PRF
  'Zhau left.'
  - b. Neinuo tuo rüli ya mo.
     neinou walk slow HAB NEG
     'Neinuo does not walk slowly.'

*tuo* 'walk/leave' is also used to indicate possession in some contexts – when the possessor is in motion or when there is a sense of movement involved in the situation described. (78) will be most apt if Vibou, the possessor, is travelling or moving from one place to another.

(78) Vibou tsie rie raka kekra tuo.

vibou now also money many walk/leave

'Vibou still has a lot of money.'

In (79), the verb expresses locational meaning, and here too, it suggests that the people involved are on the move.

(79) N leshü u a likho nu tuo
2SG book DET 1SG bag LOC walk/leav
'Your book is in my bag.'

The future time reference is marked with an auxiliary verb *tuo* as in (80). However, the auxiliary *tuo* here does not show any sense related to the verb *tuo* 'walk/leave, that is, there is no sense related to 'being on the move' in (80).

(80) No themvü u ngu tuo.

2SG star DET see FUT

'You will see the star.'

In a compound verb construction, *tuo* 'walk/leave' indicates that the activity or the event encoded by the main verb is continuing and that the subject referent is in motion, generally moving from one place to another. Thus (81) can be said of a group of people walking and singing, or of a group of people singing in a moving bus. For a similar activity which does not involve a change of location, such as singing inside a church, there will be *tha* 'stand' or *ba* 'sit' as in (82), to indicate that the singing is in progress.

- (81) Uko tsali chü tuo.

  3PL song do walk

  'They were singing.'
- (82) Uko tsali chü tha/ba.

  3PL song do stand/sit

  'They were singing.'

Newman (2002) says that the posture verbs in many languages can be used as auxiliaries which simultaneously classify a subject referent in terms of posture as well as functioning as a tense/aspect/modality (TAM) markers. In Kwa, the locative prepositions are homophonous with locative verbs, verbs of possession, and incompletive aspect markers (Lord 1973). <sup>15</sup> In Russian, according to Yerastov (2008), posture verbs are partially grammaticalised and they behave like progressive auxiliaries. The occurrence of posture verbs in the different kinds of sentences in Tenyidie is not a strange phenomenon. In some cases they behave like aspectual markers, however, they are more than aspectual markers, because as in Russian, they are never fully grammaticalized.

# 2.5. Constituency Test

To show that the different components of a compound belong to a single constituent, <sup>16</sup> I conduct three constituency tests, namely *movement test, elliptical test* and *shared constituent coordination test* in the following sub-sections. One of the ways syntacticians represents the idea that something is a constituent is by enclosing it in square brackets. In the examples given below, words in a sequence which form a constituent are enclosed in the square brackets.

<sup>&</sup>lt;sup>15</sup> Lord (1973) says that studies strongly support a universal relationship between location and possession, and that many languages having parallel form for location and possession proves that the homophony is not accidental. Lyons (1967), a precursor of Lord, also claimed that in many and perhaps all languages existential and possessive constructions are derive from locatives.

<sup>&</sup>lt;sup>16</sup> According to Adger (2002), a constituent is essentially a group of words which has a certain internal coherence.

## 2.5.1. Movement Test

According to this test, a sequence or a group of words is considered a constituent if it can undergo movement like preposing, postposing, or fronting for question formation. In (83a) the verb sequence *rhi shü* 'paint 'put' occurs in the sentence-final position. In (83b), the sequence along with the question particle is fronted before the relative clause. This fact indicates that they belong to the same constituent.

- (83) a. Puo miarhi no ngu kecü u rhi shü me
  3SG picture 2SG see COMP DET paint put QP
  'Did he paint the picture that you saw?'
  - b. Puo [rhi shü] me miarhi no ngu kecü u
     3SG paint put PM picture 2SG see COMP DET
     'Did he paint the picture that I saw?'

A similar possibility is seen in the examples given below. In (84a) the subject precedes the verb phrase and the yes/no question marker. Here as well, the verb phrase can be fronted as in (84b). The test shows that the verbs  $pf\ddot{u}$  'search' and tuo 'walk' belong to the same constituent.

- (84) a. Puo zhovi pfü tuo me 3SG zhovi search walk QP 'Is he looking for zhovi?
  - b. [zhovi pfü tuo] me puo? zhovi search walk QP 3SG 'Is he looking for zhovi?

Another test says that if it is possible to ask a question about a set of consecutive words in a sentence, they form a constituent. Sentences like (85a) can be questioned by a WH question like (85b). In response to the question, the sequence [leshü puo khrü lie] 'buy a book' comes as new information. The test shows that khrü 'buy' and lie 'take' belong to the same constituent.

(85) a. A presa ko se [leshü puo khrü lie] nyü ba.

1SG money PL with book one buy take want sit

'I want to [buy a book] with the money.'

b. No presa ko se kedipuo chii nyii ba ga?2SG money PL with what do want CONT QP'What do you want to do with the money?'

# 2.5.2. Elliptical Test

It is possible to omit some words in a sentence in certain discourse conditions. For instance, a person can say 'He won't pay the bill' and in response, another can say 'He will, if you remind him.' In the second sentence, 'pay the bill' is omitted. When part of a sentence is omitted in this manner, a constituent is said to be ellipted. Verb sequences within the compound verb constructions in Tenyidie can undergo ellipsis as shown in the example below.

In (86), *puo khrohi shü* 'help him' which occurs as the verb phrase in the first sentence is ellipted in the second sentence. In (87) the first sentence has the verb sequence *ze le* 'sleep enter' as its predicational elements. In the second sentence, the sequence is dropped and the sentence still makes sense – If A says the first sentence, B can say the second sentence in response without *ze le* 'sleep enter' to mean 'Viu also began to sleep.' Likewise, in (88), *puo pfe ba* 'waiting for him' is omitted in the second sentence. The different words in sequence that are omitted can be considered as constituents of some sort here.

- (86) No [puo khrohi shü] cie. A rei tuo.

  2SG 3SG help put HORT 1SG also FUT

  'You help him. I also will (help him).'
- (87) Niu [ze le] te. Viu rie te.

  niu sleep enter PRF. viu also PRF

  A says: Niu began to sleep. B says: Viu also.
- (88) A puo [pfe ba]. No rie me?

  1SG 3SG wait sit 2SG also QP

  I am waiting for him/her. You are also/too?

## 2.5.3. Shared constituent coordination test

Shared constituent coordination test says that only constituents can be shared. In the sentence 'John walked, and Bill ran, [up the hill],' 'up the hill' is shared by the two coordinated sentences and is therefore considered as a constituent. In (89), the sequence *khrü lie* 'buy take' qualifies as a constituent as it can be predicated of a coordinated noun phrase. In the same manner *mele vor* 'move come' in (90) and *pu par* 'bloom out in (91) are shared by coordinated noun phrases, and so they qualify as constituents.

- (89) Niu pen puo mu Viu pencil puo [khrü lie] niu pen one and viu pencil one buy take 'Niu bought a pen and Viu bought a pencil.'
- (90) Puo phi u rie mu puo dze u rie [mele vor te.]

  3SG leg DET also and his hand DET also move come PRF

  'His leg and his hand began to move.'
- (91) Kemere u kekra u rei mu rei [pu ba te] par **PRF** DET white DET red also and also bloom come 'The red, as well as the white, is blooming.'

The different verb sequences which are put to the test here represent the different kinds of compound verb constructions. The fact that they qualify as constituents indicates that the different elements in a compound verb constructions in Tenyidie belong to the same clause.

# Chapter 3

# Causative Constructions in Tenyidie

# 3.1. Introduction

Causative constructions have been the subject of study for quite a long time. The different ways in which they are formed, the complexities involved, and the different clause structures associated with different kinds of causation remain of interest to linguists even today. There is an extensive literature on the phenomenon in general, however, in Tenyidie, to my knowledge, no one has attempted to explain or describe it yet. In this chapter, I show how the different forms of causation in Tenyidie are expressed, and which constructions qualify as a complex predicate.

As Comrie (1989) observed, causative constructions involve the interaction of various components of the overall linguistic description, including morphology, syntax, and semantics. Several writers have called causativization as a valency increasing device with two sub-events, the causing event, and the caused event; a situation where the causee carries out an action or undergoes a change of condition or state as a result of causer's action (Song 2006, Dixon 2000). On the semantics of causation, Talmy (2000) says that the basic composition of a causative situation consists of three main components: "a simple event, something that immediately causes the event, and the causal relation between the two." Causative expressions within a language and across languages appear in different forms, some as one morphological verb, others as two-verb compositions, and they describe events ranging from very simple to more complex ones – events that have complex structures. Depending on their structure, I group the different causative expressions in Tenyidie into five different types. The description is given below.

# 3.2. Classification of Causative Constructions in Tenyidie

In a typological study, causative constructions are generally classified into "(a) lexical (synthetic), (b) morphological, and (c) syntactic (analytic or periphrastic) type" (Shibatani and Prashant 2002:136). In the literature, one also comes across different dichotomous

classifications such as direct vs. indirect, direct vs. mediated, contact vs. non-contact, etc. In Tenyidie, sentences that have a causative meaning range from a simple transitive sentence to constructions that have biclausal structure. In order to capture the relevant meaning contrast, I group them into non-segmentable lexical causatives, transitive-unaccusative alternation, causative alternation, resultative constructions, and permissive constructions.

# 3.2.1. Non-segmentable Lexical Causatives

In the lexical causatives, "the formal fusion of the expression of cause and of effect is maximal, with the effect that the causative verb cannot be analysed into two morphemes" (Song 2006:265). In English, for instance, verbs such as *kill*, and *feed*, express causative meanings in the sense that the agent's action brings about a particular process leading to a change of state in the referent of an object nominal. These verbs are not analysable into separate morphemes where the different morphemes would correspond to the meanings of *cause* and *result* of the action. Shibatani and Prashant (2002) say that traditionally this kind of transitive verbs was not considered as causatives. They call these verbs as pure lexical causatives.

Tenyidie has a number of verb pairs whose members describe similar situations but have different argument structures; one verb describes a situation which can happen without a causer, the other describes a similar event but which needs a causer and a causee. The causative verbs are called non-segmentable because they cannot be broken down into different identifiable parts. Some of the examples are given in Table 3.1:

Noncausative verb	Causative verb	
cü 'eat'	vachü 'feed'	
kre 'drink'	die 'feed with liquid'	
co 'awake'	kesü 'wake'	
tu 'burn'	the 'burn'	

Table 3.1.

None of the causative verbs shown above have identifiable causative marking vis-a-vis their non-causative counterparts, and there is no formal relation between them. The verb *vachü* has two slightly different meanings. When it takes a child or an invalid as its object, one gets a

meaning 'to feed', but when it takes an adult as its object, it means 'to treat someone with a special meal.' (1) means 'Niu fed the child'. (2) means 'Viu treated the speaker's guests (with a special dinner) last night.'

- (1) Niu nhiecü yo vachü shü niu child DIM feed put 'Niu has fed the child.'
- (2) Viu nzhü a so nie vachü shü.
  viu last.night 1SG guest DUL treat put
  'Last night Viu treated my guests.'

The other verbs: *die* 'feed with liquid', *kesü* 'wake', and *the* 'burn', describe situations which can happen only in the presence of a causer and a causee. Referring to the Kannada sentences shown in (3) and (4), Cole (1983) says that the sentences are appropriate when the complement subject is, for instance, an animal or a child, that is, an individual to whom volition is not imputed.

- (3) avanu nanage bisketannu tinnisidanu he-nom me-dative biscuit-acc eat-cause-past 'He fed me a biscuit.'
- (4) avanu nanage tiyannu Kudisidanu
  he-nom me-dative tea-acc drink-cause-past
  'He caused me to drink tea.' (Cole: (14b) and (15b))

Looking at the kind of events they described, one can say that the lexical causatives in Tenyidie are used mostly in situations when the object is given a less active role, that is, they are most felicitous when they choose a child, or an invalid or a non-human or otherwise contextually controllable entity as their object.

# 3.2.2. Transitive-Unaccusative Alternation

There is a phenomenon called *transitive-unaccusative alternation* – some call it as *causative-inchoative alternation* – in which the transitive member describes a causative situation.

According to Haspelmath<sup>17</sup> (1993:30), the verb pairs that participate in this phenomena "express the same basic situation (generally a change of state, more rarely a going-on) and differ only in that the causative verb meaning includes an agent participant who causes the situation, where the inchoative verb meaning excludes a causing agent and presents the situation as occurring spontaneously." According to Horvath and Siloni (2011), the phenomenon is 'available universally', but, as Haspelmath (1993) observed, the way in which the alternation is represented differs from language to language as shown in the examples below:

English *the stick broke* (inchoative)

the girl broke the stick (causative)

French fonder 'melt' (intr)

faire fonder 'melt' (tr)

Arabic darasa 'learn'

darrasa 'teach' (Haspelmath 1993:91)

Levin and Rappaport Hovav (1995) observed that verbs that are found in this kind of alternation are the verbs depicting change of state which typically describe changes in physical shape or appearance. Based on Jespersen's (1927) characterization, they grouped the different alternating verbs into two different classes: verbs like 'bounce', 'move', 'roll', 'rotate', 'spin' are called as *move class*, and verbs like 'bake', 'blacken', 'break', 'cook', 'cool', 'dry', 'freeze', etc., are called as *change class*.

In Tenyidie, a lot of unaccusative verbs have a corresponding transitive verb that describes a causative situation, but the operations involved in the derivation of the different verbal pairs are not regular. As in languages like Japanese and Hungarian, the morphological encoding of the alternation is not uniform (Horvath and Siloni 2011:158). In some disyllabic verbs, the pairs differ in their first syllable, in some pairs the first syllable of the unaccusative verb is dropped and only the second syllable appears as transitive verb, in some the unaccusative verbs are aspirated when they occur in a transitive sentence, and in some the same form is used both for the transitive and intransitive situations.

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<sup>&</sup>lt;sup>17</sup> Haspelmath calls it as *causative-inchoative alternation*, because he says the opposition is more restricted than the intransitive/transitive opposition. He further mentiones that the most important specific semantic condition is the presence/absence of the agent-oriented meaning components in the pair.

With regard to the two different verb classes, that is, the *move class* and the *change class*, a clear distinction is seen in the morphological encoding. All unaccusative members of the *move class* –  $r\ddot{u}ve$  'rotate',  $r\ddot{u}tou$  'roll',  $r\ddot{u}lhou$  'bounce' etc – are disyllabic with an empty morph  $r\ddot{u}$  in the word initial position. The transitive members are also disyllabic but they are differently marked; they have ke in place of  $r\ddot{u}$  in the word initial position. The unaccusative members of the *change class* are more varied, and the marking on the transitive verb is not uniform. The illustration is provided below.

Some of the unaccusative verbs of the *move class* and their corresponding transitive verbs are shown in (5) - (7) below. Unlike the verb pairs shown in table 1.1, there is a formal relation between the pairs shown in these examples. As mentioned above, the pairs differ only in the first syllable; all the unaccusative verbs begin with  $r\ddot{u}$ , but their transitive counterparts have ke in the same position.

- (5) a. A hu rünyie ba te

  1SG tooth shake sit PRF

  'My tooth is shaking.'
  - b. Puo a hu kenyie shü2SG 1SG tooth shake put'He shook my tooth.'
- (6) a. Fan u rüve ba fan DET rotate/spin sit 'The fan is rotating.'
  - b. Puo fan u keve shü3SG fan DET rotate/spin put'He rotated the fan.'
- (7) a. Ball u rütou te

  ball DET roll PRF

  'The ball rolled (away).'
  - b. Puo ball u ketuo shü3SG ball DET roll put'He rolled the ball.'

As unaccusative verbs, *rünyie* 'shake/move', *rüve* 'rotate' and *rütuo* 'roll' in (5a), (6a), and (7a) respectively have only one argument each, and there is no agent involved in the situations described. In all the transitive sentences (5b, 6b, and 7b) there are have two arguments as expected – an agent and a theme. One also sees that in all the transitive sentences, there is an animate agent. The sentences become ungrammatical if the agent role is assigned to an inanimate subject without altering anything else as shown in (8).

(8) \*Teikhrie e fan u keve shü
Wind ERG Fan DET rotate/spin put
'The wind rotated/moved the fan.'

As Horvath and Siloni (2011) observed, a cause role is indifferent to animacy and thus realizable as a human agent, a natural force or instrument, and there can be a situation where an inanimate thing such as a natural force can cause a similar event. When such events are described, another verb which profiles the causing event is added as in (9) and (10). Here, one can say that the transitive members are systematically equipped with a cause role, but when the external role is assign to an inanimate subject, it becomes necessary to overtly indicate the causing sub-event.

- (9) Dzü u pe u thu kenyie shü water DET bridge DET hit shake put 'The water hit the bridge and shook it.'
- (10) Teikhrie u fan u he keve shü wind DET fan DET blow Rotate put 'The wind blew at the fan and made it rotated.'

The unaccusative verbs of the *change class* appear in different syllabic structures; some are monosyllabic and some are disyllabic. All the monosyllabic verbs begin with voiceless stops and are related to the verb 'break'. The disyllabic verbs begin with  $r\ddot{u}$ . The verbs describe a change in physical shape. The transitive members are more varied and complex.

As shown in Table 3.2 below, the monosyllabic unaccusative members of the alternations have simple forms, but their transitive counterparts have two identifiable components; the two parts represent *caused event* and the *resultant state*. The unaccusative

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<sup>&</sup>lt;sup>18</sup> Tenyidie has four different verbs for 'break'. The verbs are chosen depending on the kind of object involved.

monosyllabic verbs are aspirated and appended to another verb when they describe a transitive situation. The first component of the transitive verb, represented by 'V', is always an activity verb, and it describes the *caused event*. The second component – the aspirated form – occurs as bound morpheme and it describes the *state* or the *result*.

Unaccusative verb	Transitive verb
tse 'break (stick)'	V+ts <sup>h</sup> e 'V+break'
te 'break (rope)'	$V+t^he$ 'V+break'
pa 'break (ball)'	$V+p^ha$ 'V+break'
<i>pró</i> 'break (glass)'	$V+p^h r \hat{o}$ 'V+break'
cie 'be with a hole'	$V+c^hie$ 'V+make hole'
ti 'be torn'	$V+t^hi$ 'V+tear'

Table 3.2

In all the transitive verbs shown in Table 1.2, the first verb slot represented by 'V' can be occupied by the verb bie 'touch' to mean different kinds of actions. In other words, bie 'touch' can occur as the causative verb like the Italian causative verb fare 'make', which according to Zubizarreta (1985) is morphologically a word but functions as a bound morpheme or as a "syntactic affix" morphosyntactically. This verb can be replaced by a more specific verb such as da 'cut',  $v\ddot{u}$  'hit' etc., which can be taken as the specific expansion of a more basic one. The two components always function together as a unit, and they resist separation by any other element. The Examples (11a- c) illustrate these claims.

The unaccusative verb tse 'break' in (11a) has only one argument. In (11b), the aspirated form  $ts^he$  'break' is appended to the verb bie 'touch', and the sentence has the third person singular pronoun puo 'she/he' as the agent, and si u 'the stick' as its theme argument. The two elements resist separation; therefore (11c) is ungrammatical. The verb bie 'touch' can be replaced by a more specific verb as in (11d). The verb  $ts^he$  'break' does not occur as an independent verb elsewhere.

- b. Puo si u bie ts<sup>h</sup>e wa te.
   3SG stick DET touch break PFV PRF
   'He broke the stick.'
- c. \*Puo si u bie mha/se ts<sup>h</sup>e wa te.

  3SG stick DET touch quickly/EMP break PFV PRF

  'She broke the stick.'
- d. Puo si u vü ts<sup>h</sup>e wa te.
  3SG stick DET hit break PFV PRF
  'She broke the stick (by hit it).'

The verb te 'break' describes the snapping of a rope and other similar objects. It occurs only in inchoative sentences like (12a). Its corresponding aspirated form occurs in sentences like (12b). Here as well, the aspirated form occurs with another verb which describes the causing event. Unlike  $ts^he$  'break' in (11b),  $t^he$  'break' can occur as an independent verb in certain contexts, but when it does so, it gets a slightly different meaning as shown in (12c). In both (12b) and (12c), there is a sense of detaching or disjoining something elongated, but as an independent verb,  $t^he$  gets a more specialised meaning, that is, it is restricted to the plucking of things like leaves, and flowers which are supported by stems.

- (12) a. Kero u te te.

  rope DET break PRF

  'The rope broke.'
  - b. Puo kero u da t<sup>h</sup>e shü.
    3SG rope DET cut break put
    'She broke the rope (by cutting).'
  - c. Puo nyiepu u t<sup>h</sup>e shü.
     3SG flower DET pluck put
     'He plucked the flower.'

As an independent verb pa 'break' occurs in sentences like (13a). In a transitive sentence, it is aspirated and occurs as a bound morpheme as in (13b). The aspirated form can occur as an independent verb to describe situations like the breaking of a dam as in (13c), but, when it is

used to encode events like the breaking of a ball or a ball-like object, it always follows another activity verb as in (13b).

- (13) a. Balloon u pa te balloon DET break PRF 'The balloon broke'
  - b. Puo balloon u vü p<sup>h</sup>a wa te
     3SG balloon DET hit break PFV PRF
     'He broke the balloon (by hitting)'
  - c. Puo dzüde u p<sup>h</sup>a wa te
     3SG dam DET break/open PFV PTF
     'She break/open the dam (emptied the dam)'

In the following examples, one sees a slightly different operation. In (14a), the inchoative verb  $pr\delta$  'break' has a high tone. Its transitive counterpart has a different tone, that is, when  $pr\delta$  'break' occurs in a transitive sentence, it is not only aspirated, but it occurs in a low tone. The transitive form  $p^h r\delta$  'break' combines with another verb as in (14b). When the aspirated form occur as an independent verb in an ordinary transitive sentence such as (14c), it has the same tone as the inchoative verb  $pr\delta$  'break' but it denotes a slightly different event – it means cutting something with the help of an instrument.

- (14) a. Li u pró te.

  pot DET break PRF

  'The pot broke.'
  - b. Puo li u mesü p<sup>h</sup>rò wa te.
     3SG pot DET kick break PFV PRF
     'He kicked and broke the pot (break by kicking).'
  - c. Puo nhasi u p<sup>h</sup>ró shü.
     3SG fruit DET cut put
     'She cut the fruit'

In English, as Rappaport Hovav and Levin (1998) observed, the verbs of change of state such as 'break', 'dry' or 'widen' lexicalize a particular achieved state, that is, they denote the bringing about of the state, but leave the nature of the causing activity unspecified. In

Tenyidie, as shown in (12b), (13b), and (14b), change of state verbs denote the state as well as specify how it is achieved, that is, they lexicalize the manner involved.

The alternation processes shown in (11) - (14) look a little unusual, but Tenyidie is not the only language where the causative verbs are aspirated. According to Matisoff (1976), Modern Burmese has over 50 pairs of verbs, where the intransitive or the "simplex" verbs which are semantically stative begin with a non-aspirated consonant; their transitive/causative counterpart begin with an aspirate. Tenyidie is also not the only language where tonal shifts are involved in deriving the causative verb form. In Lushai, an important central Kukish language, tone is used in marking grammatical relationships, including causativity.

The processes involved in turning the disyllabic unaccusative verbs into the causative verbs are slightly different from what is shown in the foregoing discussion. All the disyllabic unaccusative verbs begin  $r\ddot{u}$ . When these verbs occur in a transitive sentence, the first syllable is either dropped or is replaced by another activity verb. If the second syllable of the unaccusative verb begins with a voiceless stop consonant, it is aspirated in a transitive sentence. Some of the examples are shown in Table 3.3.

Inchoa	tive	Causative
rüko	'crack'	$V+k^ho$ 'to crack'
rüpri	'loose'	$(V)+p^hri$ 'to loose'
rüde	'deform'	V+de 'to deform'
rüwi	'bend'	V+wi 'to bent'
rürie	'fall (fruit)'	V+rié 'to make it fall (fruit-like substance)'
rüpa	'fall (leave)'	$V+p^ha$ 'to make it fall'
rüla	'fall' (stone)	V+la 'to cause something to fall down'
rüzou	'fall' (sword)	(V)+ zou 'to remove something elongated'

Table 3.3

Examples (15a) and (15b) describe two similar situations, but they differ in specifying how the change of state happened. In (15b), the caused event is described by the verb stem  $v\ddot{u}$  'hit', and the resultant state is described by  $k^h o$  'crack' which occur as a bound morpheme.

When  $k^h o$  'crack' occurs as an independent verb, it expresses a different meaning as shown in (15c).

- (15) a. Ketsie u rüko te.

  stone DET crack PRF

  'The stone cracked.'
  - b. Puo ketsie u vü kho wa te.
     3SG stone DET hit crack PFV PRF
     'He cracked the stone (by hitting).'
  - c. Puo tsu kese k<sup>h</sup>o te.
    3SG go bamboo.shoot peel PRF
    'He went to peel bamboo shoot (to remove the cover).'

A similar process is seen in the following examples. The unaccusative verb in (16a) is disyllabic. In (16b) the transitive verb is monosyllabic. Here, the first syllable  $r\ddot{u}$  of the unaccusative verb is dropped, and the second syllable is aspirated.

- (16) a. Kero u rüpri te.

  rope DET loose PRF

  'The rope loosened.'
  - b. Puo kero u p<sup>h</sup>rì shü
     3SG rope DET loose put
     'He loosened the rope.'

In (17a) and (17b), the verbal pair differs only in the first syllable. The unaccusative verb begins with the usual  $r\ddot{u}$  while the transitive sentence has another verb ki 'pull' in the same position. There is no aspiration as the second syllable does not begin with a voiceless stop.

- (17) a. Thezhü u rüwi te.

  rod DET bend PRF

  'The metal (rod) got bent'
  - b. Puo thezhii u ki wi wa te.3SG rod DET pull bend PFV PRF'She bent the metal (rod) (by pulling)'

In (18), the first syllable  $r\ddot{u}$  of the unaccusative is simply dropped in the transitive verb; it is not replaced by any other verb or element. The second syllable appears as it is in the intransitive sentence

```
(18) a. Puo ziecha u rüzou te.

3SG sword DET fall down PRF

'His sword came out (from the sheath).'
```

```
b. N ziecha u zou lie.2SG sword DET draw IMP'Draw your sword.'
```

What one sees in the examples shown above is the total absence of the morpheme  $r\ddot{u}$  in all the transitive sentences. Here one can say that the morpheme  $r\ddot{u}$  appears like an anticausative affix (reported to have been coined by Nedjalkov and Sil'nickij (1969)) in languages like Russian.

There is another phenomenon called 'labile alternation' (Haspelmath 1993), in which the transitive verb and its corresponding unaccusative (inchoative) verb appear in the same form. In English, for instance, there are pairs like *open* (intr.): *open* (tr.); *break* (intr.): *break* (tr.). Tenyidie also has this kind of alternation; the verb *mhe* occurs in an intransitive as well as in a transitive sentence. In (19a) *mhe* 'stop burning' has only one argument, that is, the theme argument 'the candle'. In (19b), the verb selects two arguments; the agent and the theme.

```
(19) a. Candle u mhe te.

candle DET go.off PRF

'The candle stopped burning.'
```

```
b. Puo candle u mhe wa te.3SG candle DET put.out PFV PRF'She put-out the candle.'
```

Like the verbs 'spin', 'roll' and 'shake' described in (5) - (7), the verb *mhe* 'put off' by itself does not take an inanimate subject, therefore (20a) is ungrammatical. When the agentive role

is assigned to an inanimate thing like a natural force, *mha* 'put off' is appended to another verb as in (20b).

- (20) a. \*Teikhrie e candle u mhe wa te.

  wind ERG candle DET put.off PFV PRF

  'The wind put-out the candle.'
  - b. Teikhrie e candle u he mhe wa te.
     wind ERG candle DET blow put.off PFV PRF
     'The wind blow-off the candle.'

Haspelmath (1993) says that the basic situation the alternating verbs describe is always a change of state. Verbs like 'break', 'melt', 'roll', 'open', typically occur in the alternation, but verbs like 'work', 'dance', 'criticize', 'built', 'sleep', do not. Levin and Rappaport Hovav (1995) also say that the core class of causative alternation verbs are the verbs of change of state, which typically describes changes in the physical shape or appearance of some entity. The different alternating verbs shown in (15) to (20) describe a change of state or a change in physical shape or appearance. I have also shown that verbs that belong to move class and change class behave differently. In all the examples, the components in the transitive alternant behave as a single unit for all syntactic operations like the VV compounds found in some African languages like Igbo (Lord 1975). Commenting on the segmentable lexical causatives, Shibatani and Prashant (2002) say: "tighter connection between the root element and the causative formative reflects the tighter relationship between the causing and the caused event which always share a single spatio-temporal specification" (Shibatani and Prashant 2002:166). The same thing can also be said of the transitive verb form described here because the bond between the two components is always tight, and they always share a single spatio-temporal specification.

### 3.2.3. Causative Alternation

It is said that the morphological marking on the transitive-unaccusative alternation is idiosyncratic, but the phenomenon is available universally. Causative alternation, on the other hand, has a uniform morphological realization but the phenomenon is not universal and the

properties vary from one language to another (Horvath and Siloni 2011)<sup>19</sup>. In this section, I show that the causative verb forms of the causative alternation have identical morphological encoding, that is, they uniformly marked. As a separate phenomenon, the causative verb form exhibits properties different from the ones described in the foregoing section. Unlike the causative sense  $\alpha$  executes the action on  $\beta$  (Horvath and Siloni 2010) seen in the transitive-unaccusative alternation described above, the causation here roughly means cause to V-intransitive (Rappaport Hovav and Levin 2005), or  $\alpha$  causes  $\beta$  to do the action, where  $\beta$  corresponds to the causee.

The causative verb forms are derived by prefixing the morpheme *pe*- to the verb. The causative morpheme *pe*- occurs with transitive as well as intransitive verbs, however, like the causative morpheme -*aa* in Hindi as in *chaakh-na* 'to taste', and *chakh-aa-na* 'cause to taste', only a handful of transitive verbs which belong to an *ingestive* class take the causative morpheme (Ramchand 2008). Some of the verbs with which the prefix occurs are shown in Table 3.4.

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As in Horvath and Siloni 2011, I call the constructions as *causative alternations* because the sole function of the prefix *pe*- is to indicate causation, and it is used in the derivation of the causative verb form.

<sup>&</sup>lt;sup>20</sup> Bhatt (2003) says that in Hindi, a coherent set of transitive verb take the morpheme *aa*- in the derivation of causative verb forms. He calls these verbs *ingestives* or *ingesto-reflexives*, because they, in typical case, refer to some sort of ingestion, whether literal or not so literal.

Non-c	eausative verb	Causative verb form
 сhü	'pain'	pe-chü 'cause it to feel pain/hurt'
co	'be awake'	pe-co 'cause it to wake up'
jo	'be guilty'	pe-jo 'to blame'
khe	'be without food'	pe-khe 'make someone/thing stay without food '
krü	'fall'	pe-krü 'cause it to fall'
ри	'explode'	pe-pu 'cause it to explode'
rhi	'be alive'	pe-rhi 'make it/keep it alive'
sia	'die'	pe-sia 'cause it to die'
tu	'burn'	pe-tu 'make it burn'
kra	'cry'	pe-kra 'cause it to cry'
ta	'run'	pe-ta 'to make it run'
pro	'fly'	pe-pro 'make it fly'
sie	'rise'	pe-sie 'to raise'
si	'know'	pe-si 'make known/inform'
ngu	'see'	pe-ngu 'cause it to see/ show'
сhü	'hear'	pe-chü 'cause to hear'

Table 3.4

Some of the situations the non-causative verbs and their corresponding causative verb forms describe are shown below. Unlike the causative situations described in the previous section, causative sentences here can have an agent causee as shown in (21). The verb ta in (21a) has only one argument. In (21b), the verb is prefixed with the causative morpheme pe-and the verb form pe-ta 'cause to run' subcategorises for another argument. The sentence has the meaning  $\alpha$  causes  $\beta$  to do the action, where  $\beta$  is an agentive causee.

```
(21) a. Tepfü u ta te.

dog DET run PRF

'The dog ran away.'
```

b. Pete tepfü u pe-ta wa te.pete dog DET CAUS-run PFV PRF'Pete caused the dog to run away.'

In the following examples, the causative sentence has a sense *cause to V intransitive* rather than  $\alpha$  *causes*  $\beta$  *to do the action*.

```
(22) a. Candle u tu ba candle DET burn sit 'The candle is burning.'
```

```
    b. Vito candle u pe-tu shü
    vito candle DET CUAS-burn put
    'Vito lighted the candle.'
```

Kemmer and Verhagen (1994) observed that there is a historical process where the causative markers are often absorbed and become one with the root verb they occur with. "This diachronic development", they say, "explains a semantic relatedness between the transitive verb expressing causation and the fossil causatives." In Tenyidie, a number of transitive verbs that begin with *pe* express causation. However, in these verbs, *pe* is no longer regarded as a separate morpheme because the verbs once stripped of this element would not make any sense which is in some way related to the meanings they denote. One can, therefore, say that in these verbs, the prefix has become one with the root. Some of the examples as given below:

```
petha 'to teach'

pekie 'to show'

penyü 'to defeat'

pese 'to ill treat'
```

In some contexts, it appears like the causative morpheme *pe* changes words from other categories into a transitive verb. This is seen in the following examples.

```
pènuō 'give birth'pèső 'host'pèviē 'possess'
```

The noun  $nu\dot{o}$  means 'baby' or 'young one' and the verb  $p\dot{e}nu\bar{o}$  means 'give birth'. If this verb is split into pe and nuo and assigns the verbalizing-cum-causativizing functions to pe, one gets a sense very close to the meaning 'to give birth', that is, pe + nuo = cause + baby (to cause baby). There is a tonal difference between the second syllable  $nu\bar{o}$  in the verb  $p\dot{e}nu\bar{o}$ ,

and the noun  $nu\dot{o}$  'baby' or 'young one'. A similar relation is seen in the verb  $pevi\bar{e}$  'posses'. The second syllable  $vi\dot{e}$  appears in a possessive sentence like  $hau_1\ a_2\ vi\dot{e}_3$  'this  $_1$  me $_2$  thing $_3$ ' 'this is mine'. As a transitive verb,  $p\dot{e}vi\bar{e}$  means 'possess' or 'own something' which also means 'causing something to become one's property. Here too, one sees a change in the tone of the morpheme vie. As a possessive marker, it has a low tone (`), but in a transitive verb, it gets the level tone ( $^-$ ). Another example is the verb peso 'host' which is related to the noun so 'guest'. Here too, pe looks like the verbalizing-cum-causative morpheme, because to host a person simply means making a person become one's guest. There is a sense of causation in all the three verbs.

The causative morpheme *pe*- occurs with a large number of verbs; transitive as well as intransitive verbs. However, there are some verbs with which it does not occur. The following sub-sections explain why some verbs resist it.

# 3.2.3.1. The Causative Morpheme *pe*- and the Non-segmentable Lexical Causatives

As shown in Table 3.5, the causative morpheme freely occurs with the intransitive verbs that have non-derived lexical causative counterpart. Thus *pe-co* 'cause to wake' exists alongside *kesu* 'to wake', *pe-tu* 'cause to burn' exists alongside *the* 'to burn', and *pe-sia* 'cause to die' and *dukhri* 'to kill' exist together. But the transitive verbs  $c\ddot{u}$  'eat' and *kre* 'drink' do not take the prefix *pe-*, and therefore the verb form \**pe-c\bar{u}* 'cause to eat' and \**pe-kre* 'cause to drink' do not exist in Tenyidie. Here the impermissibility of the form \**pe-c\bar{u}* 'cause to eat' and \**pe-kre* 'cause to drink' is not due to the presence of the lexical causative counterpart, but as mentioned earlier, among the transitive verbs, only a handful of them which come under the *ingestive verb* category occur with the prefix.<sup>21</sup>

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<sup>&</sup>lt;sup>21</sup> Masica (1976:46), describes ingestive verbs as "a small set of verbs... having in common a semantic feature of taking something into the body or mind (literally or figuratively)." In Tenyidie, all the transitive verbs which occur with the prefix *pe*- have the sense of taking something into the mind figuratively.

Non-causative verbs	Lexical causative verbs	Morphological causative verbs
co 'awake'	kesu 'wake'	pe-co 'cause to wake'
tu 'burn'	the 'burn'	pe-tu 'cause to burn'
sia 'die'	dukhri 'kill'	pe-sia 'cause to die'
cü 'eat'	vachü 'feed'	*pe-cü 'cause to eat'
kre 'drink'	die 'feed with liquid'	*pe-kre 'cause to drink'

Table 3.5

The verb pairs – *kesü* 'wake' and *pe-co* 'cause to wake'; *the* 'burn' and *pe-tu* 'cause to burn'; *dukhri* 'kill' and *pe-sia* 'cause to die' – describe similar situations but there is always a subtle difference in their denotations. The different contexts in which these verbs occur are described below.

# pe-co 'cause to wake' and kesü 'wake'

The verb form *pe-co* is used when the causer unintentionally or indirectly makes the causee to wake up. *kesu* means to wake someone directly and intentionally. Example (23a) implies that the speaker did something and unintentionally woke Zhoto up. The act of waking here is unintended or ill-timed. Example (23b) simply means the speaker deliberately woke up Zhoto.

- (23) a. A zhoto pe-co wa te.

  1SG zhoto CAUS-wake PFV PRF

  'I made Zhoto to wake up.'
  - b. A zhoto kesu shü.1 SG zhoto wake put'I woke up Zhoto.'

pe-co can have an inanimate causer as in (24a). kesü on the other hand selects only a human causer, therefore (24b) is ungrammatical. The first form of causation can be called as indirect causation while the latter can be called as direct causation here.

(24) a. Mhapfe u a pe-co wa te.

noise DET 1sg CAUS-wake PFV PRF

'The noise woke me up.'

b. \* Mhapfe u a kesü wa te.
 noise DET 1sg wake PFV PRF
 'The noise woke me up.'

## pe-tu 'cause to burn' and the 'to burn'

In Hebrew, *saraf* 'burn' has a sense 'consume by fire'. This verb can be predicated of leaves or paper, but not flames or candles. There is another verb *ba'ar* which means 'burn' in the sense of 'blaze' or emit heat and light'. This verb can be predicated of flames and candle, and it shows the morphological causativization pattern expected of an intentionally caused verb (Levin and Rappaport Hovav 1995). *pe-tu* 'cause to burn' behaves like the verb *ba'ar* 'burn' in Hebrew in that it occurs in contexts like (25a) where it denotes an act of lighting a candle. Like the Hebrew verb *saraf* 'burn', *the* 'to burn' is used to mean burning of things like wood and other combustible substance and it occurs in sentences like (25b). Example (26a) is grammatical but (26b) is not because *the* 'burn' requires an object that can be burned on the fire.

- (25) a. Puo candle u pe-tu shü.

  3SG candle DET CAUS-burn put

  'She caused the candle to burn' ('She lighted the candle')
  - b. Puo ketsa u the shü.3SG forest DET burn put'He burned the forest.'
- (26) a. puo light u pe-tu shü

  3SG light DET CAUS-burn put

  'She caused the light to burn' ('She put on the light.')
  - b. \*Puo light u the shü3SG light DET burn put'She burned the light.'

#### pe-sia 'cause to die' and dukhri 'kill'

The verb form *pe-sia* is used when the causer or the agent is not directly involved in the act of killing but is in some way responsible for the death. *Dukhri* 'kill' simply means someone killed someone or something. (27a) means Viu caused the sheep to die, which could be due to negligence. (27b) means Viu killed the sheep. The two different kinds of causation here correspond to *indirect/mediated causation* and *direct causation* respectively.

```
(27) a. Viu tekuonuo yo pe-sia wa te.
viu sheep DIM CAUS-die PFV PRF
'Viu caused the sheep to die.'
```

```
b. Viu tekuonuo yo dukhri wa te.viu sheep DIM kill PFV PRF'Viu killed the sheep.'
```

# 3.2.3.2. The Causative Morpheme *pe*- and the Transitive-Unaccusative Alternation

In Table 3.4, it is shown that the causativizing prefix *pe*- occurs with transitive as well as intransitive verbs. However, there is a group of unaccusative verbs which do not occur with the causative morpheme. Verbs that belong to this class are the ones that participate in the transitive-unaccusative alternation described in Sections 2.1.2. The following derivations are ill-formed – the first two examples belong to the *move class* and the other four examples belong to the *change class* of unaccusative verbs, which again splits into monosyllabic and disyllabic verbs.

```
*pe-riinyie 'cause to shake'

*pe-riive 'cause to spin or rotate'

*pe-pro 'cause to break'

*pe-pa 'cause to break

*pe-riiko 'cause to crack'

*pe-riiwi 'cause to bend'
```

The kind of restriction seen here is also seen in other languages. For instance, in Marathi, the causative suffix -aw – which has a moderately high degree of productivity – gets attached only to those intransitive verbs that do not have the corresponding causative forms. Thus \*ughaD-aw-Ne 'to open', \*khaa-aw-Ne 'to feed', \*mar-aw-Ne 'to kill', are not possible because these verbs have other forms of transitive shown below.

ughaD-Ne 'to open' (intr.) : ughaD-Ne 'to open' (tr.)

khaa-Ne 'to eat' : bharaw-Ne/khaa-u ghaal-Ne 'to feed'

mar-Ne 'to die' : maar-Ne 'to kill'.

(Shibatani and Prashant 2002:142)

In Japanese, "only intransitive roots with no other transitive form can behave lexically with - sase, that is lexical interpretations of -sase are possible only if the root to which it is attached does not have a transitive form derived in another way" (Harley 2005:19). The causativizing prefix pe- in Tenyidie occurs only with those unaccusative that do not have other forms of derived causatives, some unergative verbs, and a couple of transitive verb that belong to the ingestive verb class. One can, therefore, say that the prefix pe- has a moderately high productivity, but it is not fully productive.

# 3.2.3.3. The Causative Morpheme *pe*- and the Transitivizing Prefix

While dealing with the relation between the causativization of transitive verbs and intransitive verbs, Kemmer and Verhagen (1994) predict that the causees in intransitive causatives are most likely – cross-linguistically – to occur with accusative case marking, as in the basic transitive clause schema which forms their structural and conceptual model. They also noted that in many languages, clauses of the type 'I ate the cake' and 'I gave her the apple' are used as basic templates or patterns for more complex causative structures of the type 'I made Terry cry' and 'I made John do it' respectively. They predict that many languages "will grammaticize this pattern as the strongly preferred or even the only possibility for marking of the causee" because "there are more semantic similarities between causatives and simple clause structures than have been acknowledged" (Kemmer and Verhagen 1994: 138). They argue that viewing one construction as an extension of the other best explains the use of identical verbal markers for the causatives and other simple transitive clauses.

In Tenyidie, causativised verb forms are like the simple transitive verbs in the following ways:

- (a) Case assignment: Constructions with the causative morphemes are like other ordinary transitive sentences in case marking. In (28), the subject of the verb khrohi 'help' has a nominative case and the object has an accusative case as expected. We see the same case form in the causative sentence (29). The verb  $kr\ddot{u}$  'fall', which assigns a nominative case to its sole argument when it occurs as an independent verb, gets the ability to assign an accusative case when it combines with the causative marker pe-. Thus in (29) the second person singular pronoun, that is, the causee is assigned an accusative case like the object NP in (28).
- (28) á n khrohi shü tuo
  1SG.NOM 2SG.ACC help put FUT
  'I will help you.'
- (29) á n pe krü shü tuo

  1SG.NOM 2SG.ACC CAUS fall put FUT

  'I will cause you to fall.'
- (b) Transitivity Harmony: Dasgupta (1977a) observed that in Bangla, certain compounds or constructions are considered ill-formed because the transitivity of the components involved is different. For instance, (30a) and (31a) are well-formed because the verb stems which function as vectors agree in transitivity with the poles to which they are attached. On the contrary, (30b) and (31b) are ill-formed because the different components involved differ in their transitivity.
- (30) a. rOmes rege uThlo

  "Ramesh become-angry-and rise-past-3rd-pers. casual"

  'Ramesh became angry'
  - b. \*rOmeS rege tullo
- (31) a. SumitrOmeSke ragie tullo

  "Sumit Ramesh-acc. become-angry-CAUSE-and raise-past"

  'Sumit made Ramesh angry'
  - b. \*Sumit rOmeSke ragie uThlo

In Tenyidie, some constructions maintain transitivity harmony when verbs appear in sequence. This is shown in the examples below. (32) shows that *khe* 'be without food' is an intransitive verb. In (33), this verb occurs with *sia* 'die' which is also an intransitive verb. In (34) the transitive verb *ze* 'pierce' occurs with *khri* 'kill' and not *sia* 'die'. In (35), the intransitive verb *khe* 'be without food' is prefixed with the causative prefix *pe*-, and it chooses the transitive verb *khri* 'kill' and not *sia* 'die' exactly like the verb *ze* 'pierce' in (34).

- (32) Themia ko zha kenie khe ba te man PL day two be.without.food sit PRF 'The people are without food for two days.'
- (33) Mithu u khe sia (\*khri) te cow DET be.without.food die (\*kill) PRF 'The cow died of starvation.'
- (34) Puo mithu u ze khri (\*sia) wa te 3SG cow DET pierce kill (\*die) PFV PRF 'He has killed the cow by piercing it.'
- (35) Puo mithu u pe-khe khri (\*sia) wa te 3SG cow DET CAUS-be.without.food kill (\*die) PFV PRF 'He caused the cow to die by starving it.'

The same restriction is seen in (36). The verb *phri* 'untie' is a transitive verb, therefore it occurs with the causativized/transitivised form of the verb *ta* 'run'. The sentence would be ungrammatical if *ta* 'run' is not prefixed with *pe*-.

(36) Puo tepfü u phri pe-ta wa te 3SG dog DET untie CAUS-run PFV PRF 'She caused the dog to run away by untying it'

In Oromo, it is said that the causative morpheme and the transitivizing affix are identical (Dubinsky, Lloret, and Newman 1988). Even in Tenyidie, some surface facts seem to suggest that the causative prefix *pe*- acts like a transitivizing morpheme. However, as shown in Table 3.4, there are some transitive verbs which occur with the prefix *pe*-. For example, *pe-ngu* 'cause to see/ (to show)' is derived from the verb *ngu* 'see', and *pe-si* 'cause

to know' is derived from the verb si 'know'. In Tenyidie, therefore, the causativizing prefix cannot be equated with or called as the transitivizing morpheme.

## 3.2.4. Resultative Constructions

Levin and Rappaport Hovav (1995) observed that causative verbs are generally classified as accomplishments, and accomplishments are usually analyzed as complex predicates involving a causing event that brings about some change of state or location. While the morphologically simple accomplishment verbs usually specify either the causing event or the result, resultatives express both the causing event and the change of state. However, as Goldberg and Jackendoff (2004) pointed out, resultative constructions show a lot of variations and idiosyncrasies, and not all of them express causation even though they form a sort of "family of construction." For instance, in 'He wiped the table clean', <sup>22</sup> the verb 'wipe' specifies the causing activity and 'clean' specifies the resulting state, but, in 'The pond froze solid', the semantics simply means *X became Y*.

Resultative constructions in Tenyidie are composed of two different parts; the first part describes the causing event, and the second part denotes the result. The component which denoted the causing activity involved is always a transitive verb and the components which denote the result or change of state consist of the affix ke-/pe- $^{23}$ and an intransitive verb. The verbal pairs in Table 1.6, and the subsequent examples illustrate how resultatives are constituted.

<sup>&</sup>lt;sup>22</sup> Some writers call these kinds of constructions as periphrastic or analytic causatives (Kemmer and Verhagen 1994:117)

 $<sup>^{23}</sup>$  pe- and ke- behave as an allomorph here, the former occurs before monosyllabic verbs and the latter occurs before disyllabic verbs.

Non-c	causative verb	Causative verb form
shürh	o 'be well/healthy'	chü ke-surho 'make CAUS-well (heal)'
mene	'be soft'	chü ke-mene 'make CAUS-soft (soften)'
zivi	'be beautiful'	chü ke-zivi 'make CAUS-beautiful (beautify)'
mesa	'be clean'	chü ke-mesa 'make CAUS-clean (clean)'
thepfu	u 'be brave'	chü ke-thepfu 'make CAUS-brave (embolden)'
cha	'be long'	chü pe-cha 'make CAUS-long (lengthen)'
zha	'be big'	chü pe-zha 'make CAUS-big (widen)'
dzü	'be short'	chü pe-dzü 'make CAUS-short (shorten)'
kra	'cry'	(chü) pe-kra 'make CAUS-cry (make to cry)'
ta	'run'	(chü) pe-ta 'make CAUS-run (make to run)'
chü	'pain'	(chü) pe-chü 'make CAUS-pain (make to feel pain)'
krü	'fall'	(chü) pe-krü 'make CAUS-fall (make to fall)'
ри	'explode'	(chü) pe-pu 'make CAUS-explode (make to explode)'

Table 3.6

In both (37) and (38), causation is indicated by the verb *chü* 'do/make'. The resulting state is denoted by *ke-mesa* 'CAUS-clean' in (37) and *pe-kra* 'CAUS-cry in (38). Here, the causing verb *chü* 'make /do' behaves like the verb 'make' in sentences like 'We made her walk or we made him laugh' where the verb 'make' is "partially devoid of its lexical content and serves as a 'causative index'" (Moreno 1993:157). The part which specifies the resulting state is composed of a causative morpheme and an intransitive verb or an adjectival verb<sup>24</sup>.

- (37) Vituo mizhü u chü ke-mesa shü vituo table DET make CAUS-clean put 'Vituo made the table clean.'
- (38) Satuo sanuo chü pe-kra shü satuo sanuo make CAUS-cry put 'Satuo made sanuo cry.'

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<sup>&</sup>lt;sup>24</sup> Matisoff says that in Tibeto-Burman languages, most words that translate as English adjectives are actually only a subclass of verbs. Giridhar (1980) also says that the stems which correspond to adjectives in English behave very much like the state verbs in Tenyidie. Here i call them as adjectical verbs.

Goldberg and Jackendoff (2004) say that verbs that have the meaning *X cause Y to become Z* such as 'make' and 'get' are inherently resultative. As such, sentences like 'They made him president/ angry' cannot be paraphrased into '\*They cause him to become angry by making him.' They call sentences of this kind as verbal resultatives. In Tenyidie too, resultatives that have *chü* 'make' as the causing verb are not paraphrasable. Thus (37) and (38) cannot be paraphrased into \*Vituo table u chü shü di puo bu mesa ba te '\*Vituo caused the table clean by making it', and \*Satuo sanuo chü shü di puo bu kra te '\*Satuo caused Sanuo to cry by making her' respectively.

When *chü* 'make/do' is replaced by some other verb which is more specific in its denotation – a verb that can be taken as the specific extension of *chü* 'make/do' – as in (39) and (40), the sentence becomes paraphrasable. Like the paraphrasable resultatives in English such as 'Fred watered the plants flat' or 'She wiped the table clean', one gets a sense which roughly means 'subject makes object become AP by V-ing' (Goldberg and Jackendoff 2004). Examples (39) and (40) can be paraphrased into *Vituo table u sü shü di puo bu mesa ba te* 'Vituo caused the table to become clean by wiping it' and *Satuo sanuo vü shü di puo bu kra te* 'Satuo made Sanuo cry by beating her.'

- (39) Vituo mizhü u sü ke-mesa shü vituo table DET wipe CAUS-clean put 'Vituo wiped the table clean.'
- (40) Satuo sanuo vü pe-kra shü satuo sanuo beat CAUS-cry put 'Satuo made sanuo cry (by beating her).'

Resultatives resemble the transitive verbs of the transitive-unaccusative alternation verb pairs in the composition. However, they differ in the way the different constituents are combined. While the components of the resultatives occur as two separate words, the components of the transitive verbs occur as a single 'prosodic word.' This is shown in examples (41) and (42). When  $v\ddot{u}$  'hit' appears as an independent verb, it always has a high tone (´) except when it takes a singular pronoun as its object. In (41) the verb has a low tone (`) because it functions as a dependent verb. In (42) on the other hand, the high tone (´), the tone of the independent verb, is retained. The examples clearly show that the bond between the different components is not the same.

- (41) Satuo khrüva u vù-phrò shü satuo sanuo DET hit-break put 'Satuo broke the glass (by hitting).'
- (42) Satuo sanuo vú pè-krä shü satuo sanuo hit CAUS-cry put 'Satuo made sanuo cry by hitting.

The last five examples in Table 1.6 have the verb *chü* 'make' in parenthesis, indicating that the expressions can appear even without it. They are repeated below for elucidation.

```
(chü) pe-kra, 'make CAUS-cry (make to cry)'
(chü) pe-chü 'make CAUS-pain (make to feel pain)'
(chü) pe-krü 'make CAUS-fall (make to fall)'
(chü) pe-pu 'make CAUS-explode (make to explode)'
(chü) pe-sia 'make CAUS-die ( make to die)'
```

In all the resultative constructions where *chü* 'make' occurs as an obligatory component, the second verb is an adjectival verb and without the first verb, the constructions do not behave like a verbal element. But in the examples given right above, the second verb is a verb and it can occur with the causative prefix alone. And since *chü* 'make' in these constructions appears as a grammaticalized element to represents the causing subevent, but does not contribute any specific lexical meaning, it becomes an optional element. In most cases, an expression almost means the same with or without the verb *chü* 'make'. In some constructions, however, the presence of the verb *chü* 'do/make' makes a difference. For instance, the expressions *chü pe-rhi* 'make CAUS-live' and *pe-rhi* 'CAUS-live' denotes two different situations; *pe-rhi* 'CAUS-live' means sustaining a life, or cause a living thing to continue to stay alive, but *chü pe-rhi* 'make CAUS-live' means bringing someone or something back to life.

Commenting on the morphological features of the analytical causatives, Kemmer and Verhagen (1994) say that only one of the verbs involved in the structure occurs with verbal elements such as tense and aspect markers; the other verb is an infinitive. The two predicates are conceptually close, and syntactically, they show properties associated with single-clause structures. Kemmer and Verhagen's observation on the properties of the analytic causative can be extended to the resultative constructions. As shown in the examples above, the verb that describes the causing event does not carry any verbal element such as aspect marker. The

components do not allow any element to come in between them, and they are never independently modified or negated, but always behave as a single syntactic unit.

## 3.2.5. Permissive Constructions

Permissive constructions describe a situation where the causer permits the causee to bring about an event, without actually taking part in the event. Unlike the other constructions where causation is indicated on the verb, in the permissive constructions, causation is indicated by marking the causee – the subject of a complement clause – with bu. There is no overt morphology on the verb and the causation roughly means x let y do the action. Examples are shown in (43) and (44).

- (43) John mary bu leshü u thu shü john mary let letter DET write put 'John let Mary write the letter.'
- (44) Puo pekre ko bu ze te

  3SG ice PL let melt PRF

  'He let the ice melted.'

The marking on the subject of the complement clause looks exactly like the marking of the object in a passive sentence. In both (43) and (44), the causee is marked with bu which is also used in marking the object of the passive sentences as in (45).

(45) Viu bu Niu penyü wa te.
viu by niu defeat PFV PRF
'Niu was defeated by Viu.'

On the surface, the permissive constructions in Tenyidie look like the permissives in Hindi. Structurally, (43) and (46) look similar, however they are different in that one is a biclausal construction and the other is a monoclausal construction (Butt 1993).

(46) anjum=ne saddaf=ko ciţţ<sup>h</sup>ii lik<sup>h</sup>-ne d-ii
Anjum.F=Erg Saddaf.F=Dat note.F=Nom write-Inf.Obl give-Perf.F.Sg
'Anjum let Saddaf write a note.'

In the section below, I show that permissives in Tenyidie exhibit properties of biclausal constructions.

## 3.3. Clausal Test

I have mentioned earlier that the different constructions exhibit different structural properties. Here, I show that the transitive member of the transitive-unaccusative alternation pairs, the causative member of the causative alternation pairs, and the resultative constructions exhibit properties of monoclausal constructions. In these constructions, the different elements form a morphologically complex verb, that is, the components of the complex verb behave as one "atomic" unit like the non-derived transitive verbs in a simple clause structure (Di Sciullo and Williams 1988). The permissive constructions, on the other hand, display behaviour associated with double-clause structures. Lexical causatives describe complex situations which involve a change of state, but since they do not have a complex structure, they are not included here.

## 3.3.1. Transitive-Unaccusative Alternation

In Section 3.2.2, I have shown that the transitive members of transitive-unaccusative alternation consist of two identifiable parts as in (47). Using *thu-kenyie* 'hit-shake' as an example, I show that the components of the transitive verbs belong to a single clause.

(47) Gari u ketsie u thu keyie shü vehicle DET stone DET hit shake put 'The vehicle hit and shook the stone.'

When, *kenyie* 'shake' occurs as the only verb in a sentence, it obligatorily selects an animate subject. However, in (47) there is an inanimate NP *gari* 'vehicle' as the only subject. Here one can say that the argument structure of the predicate is determined by the combined verb form *thu-kenyie* 'hit-shake', otherwise, the sentence would be ungrammatical as there is no animate being to receive the agent role assigned by the verb *kenyie* 'shake'.

Application of the *condition B* of the binding theory – that a pronominal must be free in its governing category – further proves that thu-kenyie 'hit-shake' behaves a single

predicating unit. In (48), the two pronominals refer to two different individuals and therefore they cannot be co-indexed.

(48) Puo<sub>i</sub> puo<sub>j\*i</sub> thu kenyie shü

3SG 3SG hit shake put

'He hit and shook him.'

The translational equivalent of the transitive verbs like 'break' and 'kill' in Tenyidie always has two different verbs. In the following examples, I show that the two verbs belong to the same clause. The co-indexation possibilities seen in the examples below clearly show that both the verbs are within a single clause. In (49a) the subject NP and the object NP refer to different individuals, therefore they cannot be co-indexed. In (49b) on the other hand, the anaphoric pronoun *puo thuo puo* is co-indexed with the subject, indicating that the arguments belong to a single clause.

(49) a. Puo<sub>i</sub> puo<sub>j\*i</sub> pe khri wa te

3SG 3SG shoot kill PFV PRF

'She shot and killed him (shot him to dead).'

b. Puo<sub>i</sub> [puo thuo puo]<sub>i\*j</sub> pe khri wa te 3SG 3SG self 3SG shoot kill PFV PRF 'He shot and killed himself (shot himself to dead).'

#### 3.3.2. Causative Alternation

Languages differ in the way causative alternations are represented. In Japanese, for instance, it involves two predicates. In others like Hungarian, it involves a single predicate. In Tenyidie, the causative morpheme *pe*- forms a single predicate with the verb it attaches to as in Hungarian. The following tests prove this claim.

In (50a) the anaphoric pronoun *puo thuo puo* 'himself' is co-indexed with the subject Vozo. In (50b) the pronoun could not be co-indexed with the subject. These facts indicate that the components within the construction belong to a single predicate.

- (50) a. Vozo<sub>i</sub> [puo thuo puo]<sub>i</sub> pe-chü ba
  vozo 3SG self 3SG CAUS-pain sit
  'Vozo is hurting himself (causing himself pain).'
  - b. Vozo<sub>i</sub> puo<sub>j\*i</sub> pe-chü ba
     vozo DET CAUS-pain sit
     'Vozo is hurting him (causing him pain).'

Horvath and Siloni (2011:672) say that "if the base verb and the causative morpheme are distinct syntactic head, coordination of the complements of the causative head should in principle be possible, that is, the causative affix should be able to attach to a coordinated structure, unless some independent factors exclude it." In Tenyidie, the causative morpheme and the base verb do not occur as distinct syntactic heads. The following coordination test proves this claim. (51a) is grammatical because both the base verbs have a separate causative morpheme. If the base verbs are put under one causative morpheme as in (51b), the sentence becomes ungrammatical.

- (51) a. A presa ko [pe-pra] morei [pe-jü] wa mo

  1SG money PL CAUS-spend or CAUS-lose PFV NEG

  'I did not spend or lose the money.'
  - b. \*A presa ko [pe-[pra morei jü]] wa mo
     1SG money pl CAUS-spend or lose PFV NEG
     'I did not spend or lose the money.'

In Japanese, subject-oriented adverbs detect two agents in causative alternation. This is shown in the ambiguity created by the adverbial phrase in (52). It is said that the phrase 'without hesitation or with pleasure' can either modify the caused event, thus referring to the agent of embedded clause or the causing event, thus referring to 'the lawyer' which is the agent of the matrix clause (Horvath and Siloni 2011:687).

(52) Sono bengosi-wa {tyuuchonaku/ yorokonde} John-ni keiyakusyo-ni sain s-ase-ta the lawyer-TOP {without hesitation/ with pleasure} john-DAT contract-DAT sing do-CAUS-PAST 'The lawyer made John sign the contract {without hesitation/with pleasure}

In Tenyidie, the subject oriented adverbials detect only one subject in the causative alternation type of causation. This is shown in (53). The sentence means 'Viu happily made the dog run.', and it can never be read as 'Viu caused the dog to run happily.'

- (53) [Puo nei se di] viu tepfü u pe-ta shü 3SG happy EMP COMP viu dog DET CAUS-run put 'Viu happily caused the dog to run.'
  - \* Viu caused the dog to run happily.'

According to Ramchand (2008:167) "a typological examination of the world's languages (Julien 2000) shows that the productive causative morphology when existed, occurs closer to the root than the tense or modality inflection." The causative morpheme *pe*-in Tenyidie also occurs closer to the root than any other markers that provide aspectual information.

## 3.3.3. Resultative Constructions.

Like the other causative verb forms shown above, resultative constructions also show properties of monoclausality. The following tests show that the constituents in a resultativeconstruction appear as a single predicating unit. In (54), the third person singular pronoun *puo* 'she/he' in the subject position and the object positions refers to two different individuals, and they cannot be co-indexed. In (55), it is possible to co-index the anaphor *puo thuo puo* 'himself' with the subject John as expected. The tests show that resultatives are monoclausal construction.

- (54)  $Puo_i puo_{*i/j}$  chü ke-shürho shü. 3SG 3SG make CAUS-well put 'She made her well (She healed her).'
- (55)  $John_i$  [puo thuo  $puo]_{i*j}$  chü pe-suo wa te john 3SG self 3SG make CAUS-bad PFV PRF 'John made himself bad (John spoiled himself).'

Another proof in support of the claim comes from the coordination tests. The ungrammaticality of (56) shows that the causing verbs do not occur with the coordinated base.

(56) \*Uko ki u chü [ke-mesa mu ke-zivi] shü 3PL house DET make CAUS-clean and CAU-beautiful put 'They made the house clean and beautiful.'

In the following example, the adverbial phrase detects only one agent that is the subject of the sentence. The sentence can never mean 'Niu made Neinuo to cry without feeling ashamed.'

(57) [Menga mo di] Neiu Neinuo chü pe-kra shü shame NEG COMP neiu neinuo make CAUS-cry put 'Shamelessly, Niu made Neinuo cry.'

'\*Niu made Neinuo cry shamelessly.'

## 3.3.4. Permissive Constructions

The permissive constructions in Tenyidie exhibit properties of biclausal constructions, similar to English biclausal constructions built around the verb 'let'. The following tests prove this claim.

The different co-indexation possibilities between the different nominal expressions shown in the following examples indicate that the permissive constructions are biclausal structures. In (58) the object of the verb *khrohi* 'help' is co-indexed with the subject of the main clause. If the sentence is a monoclausal construction, it would not be possible to co-index the pronominal *puo* with any of the nominal elements in the sentence.

(58) John<sub>i</sub> mary<sub>k</sub> bu puo<sub>ij\*k</sub> khrohi shü.

john mary let 3SG help put

'John<sub>i</sub> let mary<sub>k</sub> help him/her <sub>i j\*k</sub>.'

In (59), the anaphoric pronoun *puo thuo puo* 'himself' is co-indexed with the subject which is not the subject of the main clause. This again shows that there are two clauses in the sentence.

(59) Mary<sub>i</sub> John<sub>j</sub> bu [puo thuo puo]<sub>j\*i</sub> meho ba mary john let 3SG self 3SG see sit 'Mary<sub>i</sub> lets john<sub>j</sub> watch himself<sub>j\*i</sub>.'

As mentioned earlier, in a construction where there are two predicates, it is possible to detect two agents with agent-oriented adverbials. (60) can either mean 'Voto did not hesitate to let Bio help him', or 'Voto let Bio help him without hesitation.'

(60) Voto bio bu kenuodo mo di puo khrohi shü voto bio let hesitate NEG CP 3sg help put 'Without hesitation, Voto let Bio help him.'
'Voto let Bio help him without hesitation.'

In Japanese, according to Horvath and Siloni (2011), causatives which are said to be syntactic permit causativization of a coordinated construction as shown in (61).

(61) Hanako-ga [[Masao-ni uti-o Soozisuru]-ka [heya-dai-o Hanako-NOM Masao-DAT House-ACC clean-or room-rent-ACC haraw]]-aseru koto ni sita pay-sase that to do

'Hanako decided to make Masao clean the house or pay room rent'

Hungarian, on the other hand, disallows causativization of the coordinated base verbs as shown in (62). Both for conjunction and disjunction, it requires two occurrences of the causative morpheme as in (63)

- (62) \*mari olvas- és/vagy énekel-tet-te az osztályt

  Mari-NOM read and/or sing-CAUS-PAST.DEF.DO the class-ACC

  'Mari made the class read and/or sing.'
- (63) mari olvas-tat-ta és/vagy énekel-tet-te az osztályt

  Mari-NOM read-CAUS-PAST.DEF.DO and/or sing-CAUS-PAST.DEF.DO the class-ACC

  'Mari made the class read and/or sing.'

In Tenyidie, the marker bu which marks the causee in the permissive construction can scope over a coordinated base. This is shown (64).

(64) Puo teisonhie hieko bu [rüzhü mu tsali chü] ya.

3SG everyday 1PL let play and song do HAB
'Everyday, she lets us play and sing.'

The different diagnostic tests shown above indicate that the permissive constructions in Tenyidie involve two predicates unlike the permissives in Hindu-Urdu which display properties of monoclausal structures (Butt 1993).

# 3.4. Summary

Kemmer and Verhagen (1994:121), say that "causative constructions ranges from a very restricted, correlating with a high degree of semantic specificity, to a very general, correlating with highly schematic semantics". There are intermediate cases which are relatively less specific and they cover situations ranging over various causative types. Shibatani and Prashant (2002:136) also argue that the three different types of causative constructions – lexical, morphological, and syntactic – form a continuum, with each type, furthermore, forming a continuum of its own, rendering the entire causative expressions into a single continuum. The different causatives constructions in Tenyidie can also be said to belong to a continuum. At one extreme, there are nonsegmentable lexical causatives, and at the other extreme, there are permissive constructions which are biclausal. In between, there are transitive-unaccusative alternation, causative alternation, and resultative constructions.

The different clausal tests above show that the transitive members of the transitive-unaccusative alternation, the causativized verb forms of the causative alternation, and the resultative constructions are monoclausal constructions, while the permissive constructions exhibit properties of biclausality. In Chapter 6, I will provide more examples to show that the different components in the above-mentioned monoclausal construction behave as a single predicating unit and display properties of complex predicate constructions.

# Chapter 4

# Serial Verb Constructions in Tenyidie

## 4.1. Introduction

Serial Verb Construction is a widely known linguistic phenomenon found in many of the African, Asian and New Guinean languages. In these languages, notions that are expressed through conjunction, complementation, or subordinating constructions in languages like English are expressed by means of verb serialization. It is one phenomenon which not only helps linguists understand how similar experiences or events are encoded in different languages, but also provide part of the answer to the question "What is possible in human language and what is apparently not possible?" (Crowley 2002:5).

Works on verb serialization began to appear since the late 19<sup>th</sup> century; however, it is only in the 1980s that linguistic typologists began to seriously address the phenomenon. There are diverse views and claims on the characteristics as well as the different functions these constructions perform. There are people who use verb serialization as a point of comparison to offer a classification of verbal expressions. Some even claim "that serial constructions reveal in a transparent way, universal properties of predicates, which in other languages such as English and French are more obscure" (Lefebvre 1991:38). Depending on the kind of data they deal with, a number of writers have defined what serial verb constructions are. Some of those definitions are given below.

"A serial verb construction is a succession of verbs and their complements (if any) in a single clause with one subject and one tense or aspect value." (Dechaine 1993:799)

"Serial verb constructions are tightly knit grammatical structures of a special type, constituting a particular grammatical unit, and not simply two clauses joined together to which obligatory rules of deletions have applied." (Foley and Olson 1985:26-27)

"A serial verb construction (SVC) is a sequence of verbs which act together as a single predicate, without any overt marker of coordination, subordination, or syntactic dependency of any sort. Serial verb constructions describe what is conceptualized as a single event. They are monoclausal; their intonational properties are the same as those of a mono-verbal clause, and they have just one tense, aspect, and polarity value." (Aikhenvald 2006:1)

The prototypical serial verb constructions describe events whose "unity is inviolable" (Foley 2010:107). For instance, events that have sub-parts such as causing actions and resulting state, manner of motion plus path followed, or simultaneous events performed by the same actor – sequence of events which may be conceptualized as related to each other, or show properties of macro-events<sup>25</sup>.

## 4.2. Characteristics of Serial Verb Constructions

Serial verb constructions appear in a variety of surface forms and carry a range of interpretations. As such, to come up with a clear definition seems to be a problem to the theorists. For instance, Zwicky (1990:1) says the term is often applied to constructions that are not evidently serial, or withheld from constructions that seem clearly serial. Lord (1993:2) also says that defining serial verb constructions is a 'sticky business', and "serialization is more accurately characterized as a syndrome of features and phenomena." Foley (2010:107) opines that there may not be any universal defining properties for SVCs, "although the term may still prove useful as a convenient descriptive label."

Closely related to the problem of definition is the wide variation in terminology used to refer to "structurally similar or diachronically closely related phenomena in different languages" (Crowley 2002:10). For instance, there are writers who say that one can analyze certain verb-verb compounds as instances of verb serialization because the term "compound" does not by definition contradict an analysis as serialization (Margetts 1999:101). Despite these issues, serial verbs are differentiated from other constructions based on features which

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<sup>&</sup>lt;sup>25</sup> According to Jarkey (2010) "a construction has the Macro Event Property (MEP) if temporal operations such as time adverbials, temporal clauses, and tense necessarily have scope over all events encoded by the construction"

are seen across serializing languages. The features mentioned in three important works on the topic are given below.

In Foley and Olson 1985, one of the early systematic and comprehensive works on verb serialization, the following properties are listed as distinguishing features of serial verbs constructions.

- The second verb in serial verb constructions is always in some sense a further development, result or goal of the first verb in the constructions
- No independent choice for tense is possible for the individual verbs in a serial verb
  construction, and the scope of a tense marker is necessarily over the entire verbs.
   Similar to this same tense constraint is the constraint which prohibits any independent
  choice for mood in serial constructions.
- All serial verb constructions are heavily constrained so that some core arguments are shared by all verbs in series. The most common restriction is that all verbs require the same subject
- A construction with an overt negation for the second verb is ungrammatical.

According to Sebba (1987:86-87), serial verb constructions generally exhibit the following properties:

- They have only one overtly expressed (syntactic) subject;
- They contain two or more verbs without overt markers of coordination and subordination;
- The actions expressed by the verbs are either simultaneous or consecutive, and all verbs are interpreted as having the same tense;
- Negation, whether marked once or more than once, applies to the whole string;
- Tense, aspect, mood and polarity (or whichever of these a particular language has) are
  either marked only once in the string, or else each verb in the string is marked as
  having the same tense, aspect, mood and polarity as V1;
- Either the semantic subject of Vi is the subject of Vi+1, or, the object of Vi is the semantic subject of Vi+1.

Zwicky (1990:4) says that there are at least six properties of intimate combination that are possibly relevant to the analysis of serial verbs. They are:

- First, the participants in an intimate combination are of rank W(ord) rather than P(hrase). In verbal constructions, these are V(erb)W(ord)s.
- Second, an intimate combination lacks any marker of the syntactic relationship between the participant Ws. There is simply juxtaposition, without any marker of subordination or coordination.
- Third, there is a close semantic tie between the participant Ws. In verbal constructions, the VWs together describe a single event.
- Fourth, given this close semantic tie, there is a single mood, evidential status, aspects, tense, and/or polarity for the whole combination.
- Fifth, the participant Ws, and possibly their internal arguments and/or modifiers as well, are joined into a word-like unit.
- Six, in addition to the external sharing of grammatical relations characteristic of coordination, there is an internal sharing of grammatical relations, with a single internal argument standing in some grammatical relation to each of the participant Ws.

Besides the properties given above, there are other observations made by other writers which I find relevant to the data I will be dealing with, therefore, I mention them here. Bamgboşe (1974:23) says that "the verbs in the string form a sequence which is irreversible without change of meaning." Many verbs in the constructions are marked by the relation of consequence, that is, the action of VP2 is a consequence of the action of VP1. Dechaine (1993) calls the SVCs as "bivalent VPs". She says that the properties such as *restrictions on the agreement, aspect, and NP-extraction* distinguish SVCs from bi-clausal structures and VP coordination in Yoruba. And according to Ansaldo (2006), serial verb constructions may also be lexicalized or grammaticalised and they are perceived as one intonational unit.

# 4.3. Identification of Serial Verb Constructions in Tenyidie

In Tenyidie, there are verb sequences which look like the V-V compounds in Igbo and Chinese.<sup>26</sup> Some sequences look like serial verb constructions in languages such as Yoruba,

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<sup>&</sup>lt;sup>26</sup> V-V compounds are those constructions where the verbs always occur together without any intervening element between them. According to Dechaine (1993), serialization and V-V compounds are 'intimately related' in Igbo.

Twi and Haitian where one of the complements comes in between the verbs. The language also has coordinate constructions and subordinate constructions which are formed by means of verb juxtaposition. In this section, base on the properties which are regarded as cross-linguistically stable properties of serial verbs, I differentiate serial verbs from other constructions.

# 4.3.1. The Second Verb as a Further Development, Result or Gaol of the First Verb

It is claimed that "in the serial constructions the verb phrases necessarily refer to subparts or aspects of a single overall event" (Lord 1973:269). Some have observed that, in most cases, the second verb is in some sense 'a further development, result or goal' of the first verb in the construction (Bamgboşe 1974, Aikhenvald 2006). In Tenyidie, a lot of verb sequences describe events which have sub-parts or complex events, and the meanings of the different sub-parts are expressed using different verbs. In all the examples given below, the action or state denoted by the second verb is an outgrowth of the action denoted by the first verb.

- (1) a. Uko tsiezhü themuo cha cü tuo.

  1PL tonight meat cook eat FUT

  'We will cook-eat meat tonight.'
  - b. Thevü ko lhako pa cü ba chicken PL rice pick eat sit
     'The chickens are pick-eating rice.'
  - c. Pou leshü u pie vor ya.3SG book DET hold come HAB'He take-comes (brings) the book.'
  - d. Mithu kekra khe sia tecow many be.without.food die PRF'Many cows died of starvation.'

The sequence *cha cü* 'cook eat' in (1a) describes a situation where the act of cooking and eating are seen as a single event. Likewise, the sequence *pa cü* 'pick eat' in (1b) describes a

single conceptual event. Even though the act of picking and the act of eating are profiled by two distinct verbs, they are viewed not as two separate events. *pie vor* 'hold come' in (1c), and *khe sia* 'be without food die' (to die of hunger) in (1d) also describe events which are seen as complex yet single events.

In all the examples, the second verb profiles an action or event which is an extension of the event encoded by the first verb. The sentences describe stereotypical events which are seen as a unified event by the community. In other words, they describe experiences which "evoke a cultural unit that is familiar and relevant to those who use the word" (Goldberg 2010:50). The order of verbs is fixed and is "irreversible without change of meaning" (Bamgboşe 1974:23). All the verbs in the constructions are capable of appearing as the only verb in a sentence. Unlike the verb sequence in a compound verb construction – where the second verb is partially grammaticalized – both the verbs in all the examples retain their primary meaning.

It is said that the sequencing of verbs ina serial verb is always iconic both in SVO and SOV languages (Durie (1997:330). In all the examples shown above, the sequence of the verbs is iconic. In the coordinate/subordinate constructions, on the other hand, the description of events in not iconic, and the second verb is not the further development of the first verb. Although the verbs in the main clause and the subordinate clause appear in sequence and share the same subject, and the aspectual and other markers occur at the end like they do in the serial verb constructions, the verb sequence is not iconic as shown in (2) and (3) below.

- (2) Viza rüzhü nyü ba viza play want sit 'Viza wants to play.'
- (3) Sazo nashü si se
  sazo dance know EMP

  'Sazo knows how to dance well.'

In (2) the verb *ruzhü* 'play' and *nyü* 'want' are in sequence but the *nyü* 'want' cannot be treated as an extension of the verb *rüzhü* 'play', because the sentence simply means 'Viza wants to play' and not 'Viza is playing and is wanting it.' Likewise, (3) means 'Sazo knows how to dance well' and not 'Sazo danced and understood it well.'

## 4.3.2. Overt Negation of the Second Verb

In a serial verb construction, the second verb is never independently negated. The only way to negate it is by negating the whole sentence. The following examples from Yoruba clearly illustrate this claim. In (5a), the negative  $\grave{o}$  has scope over both  $gb\acute{e}$  'cary' and  $w\acute{a}$  'come'. (5b) is ungrammatical because the second verb is independently negated. When a conjunctive  $(s\grave{u}gb\grave{o}n$  'but') is introduced as in (5c), the sentence becomes grammatical. This indicates that an overt negation of the second verb alone is possible only in bi-clausal constructions

- (5) a. Olú ò gbé àga wá
  Olu neg cary chair come
  'Olu did not bring the chair.'
  - b. \* Olú gbé àga ò wáOlu carry chair neg come
  - c. Olú gbé àga sùgbọn ò wá
    olu carry chair but neg come
    'Olu carried the chair, but did not come.' (Foley and Olson (1985:27)

In Tenyidie, the same restriction is seen in all the verb sequences which I consider as serial verb constructions. Example (6) behaves very much like (5a) above. The sentence can mean 'the person came without the book' or 'did not take the book and did not come', but it can never be interpreted as 'the person take the book and did not come'. The second verb *vor* 'come' is independently negated in none of the interpretations.

(6) Puo leshü u pie vor mo3SG book DET hold come NEG'She did not take-come (bring) the book.

When the conjunctive participle di is introduced as in (7), the overt negation of the second verb becomes possible as shown in (8). In both (7) and (8), the verb pie 'hold' and vor 'come' appear as independent verbs of two separate clauses.

(7) Puo leshü u pie lie di vor 3SG book <sup>DET</sup> hold take <sup>CP</sup> come 'She took the book and came.'

(8) Puo leshü u pie lie di vor mo te 3SG book DET hold take CP come NEG PRF 'She took the book and did not come.'

In control constructions, it is possible to negate the second verb independent of the first verb even when the verbs occur in sequence. In (9a) the verbs appear in sequence without any overt marking in between. As can be seen from the translation, in (9b), only the second verb si 'know' is negated, and, therefore, the sentence can be followed by another positive sentence. Similarly in (10a), the negative has scope over the second verb but not the first verb. The sense of assurance in the subordinate clause in (10b) indicates that only the second verb comes under the scope of negation.

- (9) a. Sazo nashü si mo sazo dance know NEG 'Sazo does not know how to dance.'
  - b. Sazo nashü si mo rei nashü ba
     sazo dance know NEG also dance sit
     'Sazo does not know how to dance, even then he is dancing.'
- (10) a. A hau cü nyü mo

  1SG this eat want NEG

  'I do not want to eat this.'
  - b. A hau cü nyü mo derei cü tuo
     1SG this eat want NEG but eat FUT
     'I do not want to eat this, but I will eat.'

# 4.3.3. Single Tense and Aspect Marker

Another distinguishing feature of serial verb constructions is that, tense, aspect, and mood are marked only once in a string, or else each verb in the string is marked as having the same marker as the first verb. In most cases, the scope of any of these markers is necessarily over the entire verbal complex, and the verbs do not independently choose them. Here single

marking indicates "more cohesive, tightly-knit structure" (Aikhenvald (2006:44). The following examples show the aspectual marking restriction in Tenyidie.

- (11) a. Nyienyo u thezou u té cü lie tế cat DET rat DET catch eat take PRF 'The cat caught-ate the rat.'
  - b. Nyienyo u thezou u té lie di cü lie të catch take COMP DET rat DET cat eat take 'The cat caught and ate the rat.'
  - c. \*Nyienyo u thezou u té lie cü lie tế
    cat DET rat DET catch take eat take PRF
    'The cat caught and ate the rat.'

In (11a), there is only one aspect marker for both the verbs  $t\acute{e}$  'catch' and  $c\ddot{u}$  'eat'. When these verbs occur in a coordinated sentence like (11b) – the verbs are separated by the conjunctive participle di – they are marked separately. When the coordinator is removed and the verbs are separately marked as in (11c), the sentence becomes ungrammatical. This clearly shows that verbs in a serial verb construction do not independently select aspectual markers. Lefebvre (1991) says that in coordinate / subordinate constructions, the two verbs are interpreted as two separate predicates involving two propositions. One can say that the coordinated sentence (11b) has two propositions.

Like the same tense/aspect constraint, there is also a constraint in the choice of mood markers. In (12a) the imperative mood marker *lie* has scope over both the verbs. In (12b) it appears twice because there are two different clauses. (12c) is ungrammatical because it contains a coordinating conjunction but has only one mood marker.

- (12) a. Leshü ko pfü kengu lie book PL search gather IMP 'Search-gather the books.'
  - b. Leshü ko pfü lie di pie kengu lie book PL search IMP CP hold gather IMF
     'Search the books and gather them together.'

c. \*Leshü ko pfü di pie kengu lie book
 book PL search CP hold gather IMP
 'Search the books and gather them together.'

## 4.3.4. Shared Arguments

As a tightly knit grammatical structure, serialized verbs are heavily constrained so that the core arguments are shared by the verbs in series. Formation of serial verb constructions on the basis of the same subject or the object-subject constraints is seen in almost all the serializing languages. It is said that type of serial verbs "in which there is identity between the two subjects of the serialized verbs represent the most widely distributed pattern in languages of the world" (Crowley 2002:40). In Tenyidie, the coordinated and subordinated sentences can always have a separate subject for the different verbs, but in serial verb constructions, the subject is obligatorily shared except in some causative constructions.

In (13a), the verbs share the subject as well as the object. When the verbs select different argument as in (13b), the sentence becomes ungrammatical. The ungrammatical sentence becomes grammatical once the conjunctive particle is introduced as in (13c) because, in a coordinate construction, the same subject constraint does not apply. In this sentence, *chü* 'make' has the third person singular pronoun *puo* as its subject, and *kre* 'drink' has the first person plural pronoun *hieko* as its subject.

- (13) a. Hieko ca chü kre

  1PL tea make drink

  'We made-drank tea'
  - b. \*Puo ca chü hieko kre3SG tea make 1PL drink'She made we drank tea
  - c. Puo ca chü shü di hieko kre

    3SG tea make put CP 1PL drink

    'She made tea and we (drank) had.'

In some constructions, there is identity between the object of the first verb and the subject of the following verb. The constructions typically express a causative relationship between the events encoded by the different verb. Crowley (1987:39) calls this type of serial constructions as "switch-subject serial verbs." and Foley and Olson (1985) call them as serial causatives. In (14), *tepfü* 'dog' which is the object of the transitive verb *phri* 'untie' appears as the subject of the second verb, that is, the causativized form of the verb *ta* 'run/ go way'.

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(14) A tepfü u phri pe-ta shü
a dog DET untie CAUS-run put
'I cause the dog to run away by loosening it.'
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In constructions with a subordinate clause, verbs are free to have different subjects. Like the verb hati 'want' in Paamese which accepts an unmarked subordinate clause as in (15), the verb  $ny\ddot{u}$  'want' in Tenyidie also accepts unmarked subordinate clause as shown in (16). In both (15) and (16), the subordinate clauses have subjects different from that of the subjects in the main clauses.

- lo-ku Ø-vati-e ko-vo-sau
  interior-1SG 3SG:REAL-want-3SG 2SG-IMM.FUT-sing
  'I want you to sing.' (literally: 'My interior wants you to sing.') (Crowley 2002:64)
- (16) A n bu vo nyü mo

  I 2SG let go want NEG

  'I don't want you to go.'

## 4.3.5. NP Extraction

One of Ross' (1967) constraints says that an element from one conjunct cannot be moved out of that structure. Several writers used this constraint to differentiate serial verbs from coordinate /subordinate constructions. Agbedor (1994:116) says that "if the NP argument of a verb in a SVC can be extracted by WH-movement, it follows that the structure cannot be a coordination or an embedded purpose or result clause". Lefebvre (1991) and Dechaine (1993) also say that while subordinate / coordinate clauses remain islands for extractions, it is always possible to extract the complement of the verbs in a serial construction.

The fact that the direct objects in (17a) and (18a) can be questioned indicates that the verbs in series belong to the same clause.

- (17) a. Uko tsiezhü themuo cha cü tuo.

  1PL tonight meat cook eat FUT

  'We will cook-eat meat tonight.'
  - b. Uko tsiezhü kedipuo cha cü tuo ga?1PL tonight what cook eat FUT QP'What shall we cook and eat tonight?'
- (18) a. A pfe khru pie ketsa ko tsü shü

  1SG shawl buy hold old PL give put

  'I bought shawls and gave to the old.'
  - b. No kedipuo khrü pie ketsa ko tsü ga?
     2SG what buy hold old PL give QP
     'What did you buy for the old?'

In (19a) *pie* 'hold' and *wi* 'cut' appear with their own complement. In (19b) the object of the verb *wi* 'cut' is focused and is, therefore, fronted. In (19c) the object of the verb take/hold is topicalized and so it is fronted. The extractability of the arguments indicates that the verbs are from the same clause.

- (19) a. Puo zie pie sibo u we shü

  3SG scythe hold tree DET cut put

  'He cut the tree with a scythe.'
  - b. Sibo u ro puo zie pie wi shü tree DET FOC 3SG scythe hold cut put 'As for the tree, he cut it will scythe.'
  - c. Zie pie puo sibo u wi shü scythe hold 3SG tree DET cut put 'With the scythe he cut the tree.'

# 4.4. Types of Serial Verb Constructions

Serial verbs constructions express different kinds of semantic composition and appear in a variety of morpho-syntactic guises. Languages differ in the way they are structured. Even within a language, they come in a variety of syntactic form; some resemble verbal compound while others share features with subordinate or coordinate constructions. In Igbo, for example, instrumental, comitative and multi-event serial verbs are expressed in surface serial construction while the dative, benefactive, and resultative serial verbs appear as V-V compounds. In Mandarin Chinese, there is a parallel split between serial constructions and V-V compounds, and in Yoruba, all the different kinds of semantic compositions mentioned above appear as serial constructions (Dechaine 1993:809). Some serial verb constructions allow other elements in between the serialized verbs, but some do not. Base on the different structural realization, several writers have broadly classified them into two classes. Foley and Olson (1985) and Crowley (2002) call them as core layer and nuclear layer serializations. Durie (1997) and Aikhenvald (2006) call them as noncontiguous and contiguous serial verb constructions. In line with the former classification, I group the different serial verbs in Tenyidie into core layer serialization and nuclear layer serialization.

# 4.4.1. Core Layer Serialization

In a core level juncture, two cores, each with their own nucleus and corresponding arguments are joined to form a larger complex core. The core units bound together in a juncture "share a common set of argument of location and time as well as other peripheral features like tense and mood" (Foley and Olson 1985; 47). Base on their semantic composition, I classify the core level juncture serial verbs in Tenyidie into six different types. They are described below.

## 4.4.1.1. Multi-events serial verbs

In a Multi-Event Serial Verb Construction, different events – generally two temporally anchored events – whose relation is tight enough to be conceptualized as a single event, appear together in a clause. This is possible because "events, as opposed to physical objects, are not individuated in the world. What in the complex flow of happenings in the world can be considered as an event is a matter of construal, reflected in the properties lexicalized in

verbs" (Levin and *Rappaport* Havov1999:14). The serialized verbs here generally describe several associated events which are experienced together, or "which form a culturally important concatenation of events" (Aikhenvald 2006:10).

Multi-Event SVCs with two verbs in a sequence is a common phenomenon. However, there are languages such as Igbo where up to four different verbs are strung together in series as in the example given below.

(20) Ógù go-ro oʻkukoʻ gbó si-e ri-e.

buy-ØAsp chicken kill-Asp cook-Asp eat-Asp

'Ógù bought [a] chicken, killed [it], cook [it] and ate [it].' (Dechaine 1993:809)

In Tenyidie, five different verbs can be strung together without any linker in between as in (21a). Here, the different acts involved are viewed as a complex yet unified event. All the verbs in the sequence are not marked and they refer to subparts of a single overall event. In other contexts, all these verbs can appear as the only verb in a sentence. The verb string can be separated by a conjunctive participle di as in (21b); however, when that happens, one gets a sequential reading.

- (21) a. Uko themuo lie pie vor cha cü tuo

  1PL meat buy hold come cook eat FUT

  'We will buy-bring-cook-eat meat.'
- (21) b. Uko themuo lie pie vor di cha cü tuo

  1PL meat buy hold come CP cook eat FUT

  'We will buy-bring and cook-eat meat.

The two sentences above almost mean the same in their denotation. However, they are structurally different – one is a serialised construction and the other is a conjoined construction with a sequential interpretation. Their difference surfaces when they are negated as in (22) and (23). In the former, the negative has scope over all the verbs in the string. In the latter, only the second conjunct comes under the scope of the negation.

(22) Hieko themuo lie pie vor cha cü mo te

1PL meat buy hold come cook eat NEG PRF

'We did not buy-bring-cook-eat meat.'

(23) Hieko themuo lie pie di cha vor сü mo te 1PL cook eat NEG PRF buy hold come CP meat 'We bought-brought meat but did not cook-eat.'

Multi-Event constructions and conjoined constructions behave differently in the use of aspectual markers. In (24a), the act of catching and eating are seen as a single event, and both the verbs share the same aspect marker lie 'take'. In (25a), the act of searching and gathering are viewed as a unified event, and the verbs  $sh\ddot{u}$  'put' which indicates perfectivity is shared by both the verbs. In the corresponding conjoined sentences, the conjunctive participle di appears in between the verbs, and there is an independent marking on both the verbs. In (24b), both te and  $c\ddot{u}$  have the separate aspectual marker. Likewise, both  $pf\ddot{u}$  and kengu in (25b) are independently marked.

- (24) a. Tekhu u mithu u te cü lie te people DET call DET catch eat take PRF 'The tiger caught-ate the cow.'
  - b. Tekhu u mithu u te lie di cü lie te people DET call DET catch take CP eat take PRF 'The tiger caught and ate the cow.'
- (25) a. Puo leshü ko pfü kengu shü 3SG book PL search gather put 'He searched-gathered the books.'
  - b. Puo leshü ko pfü shü di pie kengu shü
     3SG book PL search put CP hold gather put
     'He searched the books and gathered them together.'

In Igbo, the verbs in series have a separate yet identical aspectual marking. In Tenyidie, regardless of the number of verbs in a string, tense and aspect markers occur only once.

## 4.4.1.2. Instrumental serial verbs

According to Foley and Olson (1985), the use of serial verb constructions to indicate an increase in valency is a common feature of the Kwa languages of West Africa. They also say that the use of 'take' in serial constructions to introduce an instrumental argument is

extremely common in the serializing languages. They argued that in examples like (26), the verbs *abe* 'take' and *ufu* 'cut' have basic core frames consisting of an actor and an undergoer. But the core frame for a complex nucleus containing both the verbs includes an actor, an undergoer, and an instrument, as *sime* 'knife' functions as an instrument. They say that the core frame here is not simply the sum of the frames of each verb because the instrument argument is not in the core frame of any of the two verbs. They, therefore, call the use of *abe* as a valency-increasing device as it introduces an instrumental argument into the core frame.

(26) fu burede iji sime abe ufu

3SG bread DEF knife take cut

'He cut the bread with a knife' (Foley and Olson 1985:44)

Lord (1993) also says that in many languages, a verb meaning 'take', occurring as the first verb in a serial construction, serves to introduce an object noun functioning as a semantic instrument, patient, means, manner, or material. In Tenyidie, as Kevichüsa (2007) noted, the verb *pie* 'hold' functions as a valence increaser and behaves almost exactly like the verb 'take/hold' in other serializing languages in introducing the instrumental argument. This is shown in (28) and (29) below. In both the sentences, *pie* 'hold' occurs with the object NP with which the action is performed.

- (27) Puo si u pie a vü shü 3SG stick DET hold 1sg hit put 'She hit me with the stick.'
- (28) Puo kotari pie nhasi u phro shü

  3SG knife hold fruit DET cut put

  'He cut the fruit [a] knife.'

Durie (1997:345) says that, often, the contribution of an argument or the role it plays in a sentence becomes clear only when the entire serial complex is read together. Thus in examples like (29), *riam* 'knife' is understood as an instrument, not because of the meaning of the verb *muab* 'take', but because of the fusion of the argument structure of the verb *muab* 'take' and *txiav* 'cut'. He further says that in this sentence, *muab* 'take' has a sense much closer to that of 'use'

(29) nws muab riam txiav nqiaj qaib

3SG take knife cut meat chicken

'She cut some chicken with a knife.' (Durie 1997: 341)

One can say that, in Tenyidie, when *pie* 'hold' occurs in an instrumental serial construction, it does not necessarily imply the movement of an instrument to the agent. It is semantically not too different from *se* 'use', as such they are often used interchangeably in the instrumental serial constructions. As introducer of instrumental argument, *pie* 'hold' is an obligatory element, but in other constructions like *dative serial verb constructions* – described in the next section – it becomes an optional element.

#### 4.4.1.3. Dative serial verbs

In many of the serializing languages, dative constructions are expressed by means of verb serialization. In Yoruba and Fon, for instance, dative constructions show up as serial constructions as in (30) and (31) respectively.

- (30) Jímò ó ra èwù bùn mi

  Agr buy garment present 1sg

  'Jímò bought me [a] garment.' (Dechaine 1993:102)
- (31) Kɔkú sɔ́ àsɔ̃ ná Àsíbá

  Koku take crab give Asiba

  'Koku gave the crab to Asiba.' (Lefebvre 1991:61)

In Twi, according to Lord (1993:74), "most of the sentences with *de* ['take'] marking patient have bitransitive verbs," and verbs like *kyerg* 'show', *fem* 'lend' *kye* 'present' *bere* 'bring' and *ma* 'give' which can semantically be characterised as indicating transactions between persons, have their patients marked with *de* 'take'. In Anyi, a ditransitive verb may occur with three core arguments when the undergoer is indefinite, but when it is definite, it becomes obligatory to use the valence increasing verb 'take' (Foley and Olson 1985). In Fon, when sɔ/zé 'take' and an active verb – verb which requires an agent and a theme – combine, they encode an event that involves 'causation' and a 'change in location of the theme argument' (Lefebvre 1991).

As shown in the examples below, dative constructions in Tenyidie appear in different forms. In (32) and (33), the verb sequence looks like the dative serial verbs in Fon shown in (31). In these sentences, pie 'hold' behaves like so/ze 'take' in occurring with an 'active verb'. There is a sense of causation and sense of a change in location of the theme argument in these sentences. In (34) and (35), the verbs in series look more like the datives in Yoruba shown in (30).

- (32) Puo miarhi puo pie a pekie 3SG picture one hold 1SG show 'She showed me a picture.'
- (33) Puo thedze puo pie a ki pu
  3SG story one hold 1SG ABL tell
  'She told me a story.'
- (34) Puo leshüda puo khrü pie a tsü
  3SG book one buy hold <sup>1SG</sup> give
  'He bought me a book.'
- (35) Puo thechii u tha pie a kie
  3SG story DET point hold 1SG show
  'He pointed the place to me.'

It is difficult to say what the verb *pie* 'hold' exactly does in the examples given above. In (32) and (33), it looks like the patient maker *de* 'take' in Twi in that it immediately follows the theme argument. Examples (33) and (35) have the abstract NP *thedze* 'story' and *thechii* 'place' as their theme arguments, and this indicates that the literal sense of holding something in hands is not what it really means. Kevichüsa (2007) says that the ditransitive verbs in Tenyidie have a bipartite structure, and the two different parts are linked by an 'abstract light verb' *pie* which is suffixed to the first part. It is true that in (34) and (35), *pie* 'hold' looks like a linker because it comes in between two verbs, but if one considers examples like (32) and (33) where *pie* 'hold' appears as the first verb, and calling it as a linker runs into problem again. More confusing still is the possibility of these sentences to make sense even without this verb. My suggestion here is speculative, but since there is always a sense of passing or transferring of something to someone – figuratively if not literally – in all the dative

constructions, and one generally holds a thing before it is handed over or transferred, *pie* 'hold' comes in as one of the verbs to indicate the sense of transfer.

#### 4.4.1.4. Comitative serial verbs

Comitative serial verbs are formed when the verb *ze* combines with another verb. As an independent verb, *ze* means 'to receive someone or somebody', and it occurs in sentences like (36). When this verb occurs in a serial verb construction, it introduces a comitative sense. Like the object markers in languages like Twi, it always follows the object NP. In certain contexts, it behaves almost like the verb *pie* 'hold'; however, they always differ in their choice of complement: while *ze* 'receive' selects an animate complement or things that move, like vehicles and train, *pie* 'hold' mostly selects an inanimate object or things that can be held in hands. Thus in (37), there is *ze* 'receive' and the sentence means, 'he came with the players.' In (38) there is *pie* but *ze* is not allowed, and the sentence 'I brought the book. In (39), either of the verbs can occur. If there is *pie* 'hold' it will select an object, preferably a child or an invalid and the sentence would mean the speaker literally held the person in his hand and came. But if there is *ze* 'receive', the sentence will mean the speaker came along with person.

- (36) Uko puo ze lho

  1PL 3SG receive NEG.FUT

  'We will not take/receive him.'
- (37) A rüzhü ko ze/\*pie vor

  1SG players PL receive/hold come

  'I brought the players/I came with the players.'
- (38) A leshü u pie/\*ze vor

  1PL 3SG DET hold/receive come
  'I brought the book'.
- (39) A puo pie/ze vor

  1SG 3SG hold/receive come

  'I brought him / I held him and came.'

  'I brought him / I came with him.'

Foley and Olson (1985) observed that the use of serial verbs to indicate core arguments is functionally comparable to case marking in non-serializing languages, and there is a diachronic drift for verbs like 'give' and 'take' in serial constructions to be re-analyzed as case markers or prepositions. They also claim that "what was a complex clause consisting of serialized verbs becomes a simplex clause consisting of a single verb" (Foley and Olson 1985:56). Lefebvre (1991:70) makes a similar claim by saying that in Fon, the verb 'take' "serves as a Case assigner for the Theme (locatum) of the downstairs verb." In Tenyidie, the verb *pie* 'hold' and *ze* 'receive' can be said to be drifting toward postposition/case markers. Thus in Kevichüsa 2007, *pie* 'hold' is glossed in some of the examples as instrumental case marker, and Kuolie (2006) calls *ze* 'receive' as a comitative case marker.

## 4.4.1.5. Directional serial verbs

According to Lord (1993:9), "verbs of motion and location are among the most likely to occur in serial constructions and most likely to undergo "semantic devaluation" and often even syntactic defectivization." Foley and Olson (1985) also say that for serializing constructions, the basic active intransitive motion verbs like 'go' and 'come' are the most favoured of all verbs. Among the serializing languages, Chinese has a good number of directional serial verbs. Some of the examples are shown below.

```
pao jin
               run enter
                                      'to enter running'
                                      'to take/extract'
na chu
               take exit
pa shang
               climb ascend =
                                      'to climb up'
tong guo
               traverse cross =
                                      'to go through/cross'
                                      'to stand up'
zhan qi
               stand rise
                                                             Butt (2010:61)
```

Butt (2010) says that the different motion verbs in Chinese can mean different things in different contexts. For instance, when *guo* 'cross' is used as the main verb, it receives tone and is not subject to selectional restrictions. When it is used as a lexical V2 directional, tone is preferred but not obligatory, and it may take either a locative or a theme argument. When it is used as a light verb, it disprefers tone, must be adjacent to the main verb and does not take a locative argument. In its capacity as a pure aspect marker, it receives no tone and licenses no independent arguments.

The composition of the directional serial verbs in Tenyidie looks very much like the directional serialization in Chinese, that is, it occurs as the second verb and provides information about the direction of the event encoded by the first verb. Some of the examples are given below:

```
tuo ler
               'walk come-in'
                                    =
                                            to enter walking
               'walk come-out'
                                            to come out walking
tuo par
meli kho
               'climb go-up'
                                            to climb up
meli ke
               'climb go-down'
                                            to climb down
                                    =
               'run come
                                            to come running
ta vor
               'run go'
                                            to go running
ta vo
```

As in Chinese, motion verbs in Tenyidie occur in different contexts. Using *par* 'come out' as an example, I show that these verbs can mean different things in different contexts. In (40) it occurs as motion verb, in (41) it occurs as directional verb in a serial verb, in (42) it occurs as light verb where it modifies the main verb, and in (43) it appears as deictic marker where it indicates the spatial relation between the thing/s referred and the deictic centre.

par 'come out' as an independent verb.

(40) Par lie come IMP 'Come out'

par 'come out' as a directional verb in a serial verb construction.

(41) Puo tuo par3SG walk come'She walked hither (She came out walking).'

par 'come out' as a light verb in a compound verb construction.

(42) Niepu u pu par mo te

3SG DET bloom come NEG PRF

'The flower did not bloom out.'

par 'come out' as deictic marker.

(43) Par hau zivi kuo come this beautiful more 'This is more beautiful.'

The different components in directional serialization do not resist separation as shown in (44). The adverb *mha* 'quickly in between the verbs in series indicates that directional serial verbs belong to the core layer serialization

(44) Neisa kijuthu u meli mha kho te neisa mountain DET climb quickly go.up PRF 'Neisa quickly climb up the mountain.'

In Sranan, according to Sebba (1987), the basic motion verbs which participate in serial constructions have the potential to take locative adverb or prepositional phrase as complement. In Tenyidie, motion verbs in directional serial verb constructions also take prepositional phrase as complement. In certain contexts, they behave like the prepositions in non-serializing languages, but they perform functions which cannot be fulfilled by prepositions. For instance, in (45), the directional verb *le* 'enter/go' indicates that the speaker is not in the kitchen, and in (46) *ler* 'enter/come' indicates that the speaker is in the kitchen. As a component in serial verb constructions, directional verbs always indicate a sense of direction away from or towards the deictic centre which prepositions in the non-serialized languages are not capable of.

- (45) Dzü u mhachaki nu kru le te water DET kitchen in flow enter/go PRF 'The water has flowed into the kitchen.'
- (46) Neisa mhachaki nu nashü ler neisa kitchen in dance enter/come 'Neisa entered the kitchen dancing.'

#### 4.4.1.6. Resultative serial verbs

In the resultative serial verbs, the caused event and the resulting state are distinctly indicated. While the causing event is encoded mostly by an activity verb, the situation or state which develops as a result of the first event is encoded by another verb which is always prefixed with a causative morpheme. In all the other serial verbs, both the verbs at least have an identical subject but in the resultatives, in most cases, the object of the first verb becomes the subject of the following verb as shown in the examples below.

- (47) Puo tepfü u phri pe-ta wa tuo 3SG dog DET untie CAUS-run PFV FUT 'She will untie the dog and make it run.'
- (48) Puo mizhü u sü ke-mesa shü

  3SG table DET wipe CAUS-clean put
  'He wiped the table clean.'
- (49) Puo neinuo vü pe-kra shü
  3SG neinuo beat CAUS-cry put
  'She beat Neinuo to tears.'

The verbs in series here cannot be called as nuclear juncture because they are separated by a causative morpheme. As described in Section 3.2.4 in the previous Chapter, all elements in resultative constructions occur within a single clause.

### 4.4.2. Nuclear Serialization

Unlike the constructions described in the foregoing section, in a nuclear layer serialization, only the innermost nucleuses are joined and nothing intervenes between them. As Crowley (2002:82) observed, the "core-layer serialization allows some degree of independence to the argument structure of the verbs," but nuclear-layer serialization behaves as a single grammatical unit. The verbs in nucleus share all the core and peripheral layer arguments and operators (Foley and Olson 1985). Aikhenvald (2006:37) calls this kind of constructions as "root serialization".

Besides the resultative serial verbs shown above, all the verb sequences that express causation or show some causative meanings fall under the category of nuclear serialization. As in Dani where the transitive verbs are "conjugated by means of a nuclear juncture" (Foley and Olson 1985:49), transitive verbs like 'break', and 'kill' in Tenyidie are formed by means of nuclear juncture serialization as shown in (50) and (51). The verbs in sequence behave as a single unit for all syntactic operations.

(50) Puo si u vù tshé wa te 3SG stick DET hit break PFV PRF 'She broke the stick by hitting it.'

(51) Puo tekhu u pe khri shü
3SG tiger DET shoot kill put
'He killed the tiger by shooting.'

In both the examples above, no element or particle – spatial or temporal modifiers – can come in between the verbs or modify any of them independently. There is a strict contiguity between the two verbs, and they behave as one grammatical word. All the different operators have both the verbs within their scope. When the verbs are modified separately, the sentence becomes ungrammatical as in (52).

(52) \*Puo si u vù mha tshe wa te

3SG stick DET hit quickly break PFV PRF

'S/he quickly hit the stick and broke it'

In Yimas, it is said that when motion verbs wa 'go' and ya 'come' occur in a nuclear juncture, they occur in special suppletive forms pu 'go' and pra 'come'. The sentence becomes ungrammatical when the basic verb form is used rather that the suppletive variant (Foley and Olson 1985:41). The use of special suppletive form in SVCs is found in other languages as well. In Mwotlap for instance, it is said that some few verbs appear in different forms depending on whether they occur on their own as an independent verb or as a dependent verb in an SVC. Such 'SVC specific form' helps to distinguish SVCs from other multiple structures in the language (Aikhenvald 2006).

When verbs like  $v\ddot{u}$  'hit'  $z\acute{e}$  'pierce' and  $th\acute{u}$  'hit' occur in a non-serial construction, they have high tone ('). But when they occur in a serial construction, the tone changes to low tone (`). Thus  $v\ddot{u}$  'hit' changes to  $v\ddot{u}$  in  $v\ddot{u}$ - $tsh\acute{e}$  'hit-break',  $z\acute{e}$  'pierce' changes to  $z\grave{e}$  in  $z\grave{e}$ - $rh\ddot{o}$  'pierce-destroy',  $th\acute{u}$  'hit' becomes  $th\grave{u}$  in  $th\grave{u}$ - $phr\grave{o}$  'hit-break'. Here it can be said that the low tone verb which is specific to serial verb constructions acts like the suppletive verb forms in other languages.

The second verbs *tshe* 'break' and *khri* 'kill' in (52a) and (5b) do not occur as an independent verb elsewhere. They are obligatorily serialized. These verbs are not just meaningless auxiliaries added merely to carry inflectional elements, but they contribute their own meaning to the whole nucleus. This kind of SVC specific form is found in Igbo as well. Referring to  $k\acute{a}$  'apart' in (53) and (54) below, Lord (1975:30) says that this form does not

occur elsewhere as an independent verb, but its occurrence is always extensive enough to be assigned a meaning and inherent tone.

Like *ká* 'apart' in Igbo, *khrì* '/kill', and *tshe* 'break', *wi* 'bend' etc. do not occur as an independent verb anywhere but their occurrence is quite extensive and they have an independent transparent meaning and tone of their own.

All nuclear level junctures consist of two verbal slots. And as Foley and Olson (1985) observed, one of the slots, the open slot, is generally filled by verbs drawn from a wide variety of semantic classes. The other slot, the restricted slot, is filled by a group of verbs which belong to a particular semantic verb class. In almost all the serializing languages, the verb that belongs to the open slots precedes the one that is from the restricted slot in the linear order. These properties are seen in Tenyidie too. In both (55) and (56), the first verbs are from an open class and they can be replaced by many other verbs. The second verbs are from a restricted class, and there are not many verbs that can occupy this slot.

- (55) Puo sozha u ne rho shü
  3SG wall DET push demolish put
  'He pushed down the wall.'
- (56) Puo khrüva u mesü phro wa te

  3SG glass DET kick break PFV PRF

  'He broke the glass by kicking it.'

In the examples given above, at least one of the verbs occurs in suppletive form or as a bound morpheme, and they appear like a monomorphemic word. In (57) and (58), all the verbs occur as they would in a non-serialized context. There is no suppletive form or bound morpheme involved; still, no particle or affix can separate the verbs in series, which indicates that they are nuclear junctures. In both the examples, the various aspects of the situations are expressed as a single cognitive package.

- (57) Khunuo kekra khe sia te animal many be.without.food die PRI 'Many animals died of hunger.'
- (58) Puo zu kre meze ya mo
  3SG wine drink drunk HAB NEG
  'He does not get drunk.'

Bisang (1995:144) says that in some East and Southeast Asian languages, "a verb often merely posits an action or a state. Whenever there is a need to increase the concreteness or reduce the indeterminateness of the action described by the main verb, another verb is added by the instrument of verb serialization." In the examples shown above, without the second verb, the first verb alone would only mean that there happened an event, or there existed a state. By specifying the outcome or the result of the action described by the first verb, the second verb completes the information, thereby enables the speaker to describe a complex event in its entirety.

## 4.4.2.1. Productivity.

The productivity of verb serialization differs from language to language. Even within a language, some verbs have more selectional restriction than others. In some languages, the same initial verb can be followed by a wide variety of verbs. Some verbs occur with many different initials depending on their semantic compatibility. To show that the productivity of verb serialization differs from languages to language, I describe in brief how the meaning 'kill' is represented in different languages.

The verb 'kill' in English is a monomorphemic word. To express the meaning of this verb, a lot of serializing languages use serial verb construction. In Numbami, an Austronesian language of the Morobe region of Papua New Guinea, it is expressed as shown in (59).

(59) kolapa i-lapa bola uni
boy 3SG-hit pig dead

'The boy kill the pig.' (Foley 2010:85)

Here the causing event and the resulting state are represented by two different elements: *lapa* 'hit', and *uni* 'dead'. It is said that *-lapa* 'hit' is grammaticalised here as it can denote any act

of killing, "whether by clubbing, stabbing, or shooting, and it is not restricted to causing events with a specific manner of action" (Foley (2010:85). Thus one can say that in Numbami the verb meaning for 'kill' is expressed by a lexicalized SVC rather than a monomorphemic verb root.

In Watam, another Papuan language, 'kill' is always expressed in an SVC involving a separate overt verb for causing event and a separate verb for the resulting state. In this language, according to Foley (2010), there is no set lexicalized SVC to express the notion as in Numbami, and the different manners of killing are denoted by different verbs chosen from a set of verbs used to describe the manner of the causing event, somewhat similar to the English construction 'they speared/ knifed/ stabbed /hacked him to death'. It is said that any of the following six expressions will translate the meaning of 'kill'.

```
rug- minik- (hit die)

wak- minik- (sever die)

mo- minik- (do die)

arig- minik- (shoot die)

rutki- minik- (slash die)

rutki- yak- minik- (slash cut.open die)

(Foley 2010:85)
```

Foley (2010) further says that the above collocations are not fixed lexicalisations, for they can further be expanded to a more specific SVCs as in the last collocation, that is, rutki- yak - minik- (slash cut.open die)

In White Hmong, "to ensure that a verb such as 'shoot' or 'cut' is interpreted as successful, a second verb expressing the resulting change in the object argument is generally added to the clause" (Jarkey 2010:114). A completed activity or action is represented as in (60).

```
(60) lawv tua liab tuag

3PL shoot monkey die

'They shot some monkeys dead.' (Jarkey 2010:118).
```

In Paamese, according to Crowley (2002:96), it is not possible to express the meaning of 'kill' without indicating the kind of activity involved. *vinii*, which is translated as 'kill', is always serialized with another verb whenever the verb meaning expressed. This verb does not occur as an independent verb in a clause. It appears only as the second element in nuclear-

layer serial verb constructions. When *vinii* serializes with *uasi* 'hit' – which is largely bleached semantically and functions as a dummy 'carrier' for the serialized verb in this contexts – one gets a meaning closest to the generic verb meaning 'kill'. Thus *uasi vinii* is used to describe situations where hitting is the cause of the death, and also when something or someone is killed and there is no specific information with regard to the manner of killing.

In Tenyidie, there is no monomorphemic verb to express the meaning of the verb 'kill'. As in languages shown above, it is always expressed in a serial verb construction. For the causing event, there is always an activity verb, and for the resulting state, there is *khri* which I gloss as 'kill'. Like *vinii* 'kill' in Paamese, it can occur with a wide variety of initials. It has a fix transparent meaning but does not occur anywhere as an independent verb. The nearest one gets to the generic meaning is *dù-khrì* 'cut kill'. As the more basic form, it can be used to denote all kinds of killing where human effort is involved, even when the manner of killing is not known.<sup>27</sup>At the same time, it cannot be taken as a generic term for 'kill' as there are contexts where it cannot be used. For instance *dù-khrì* 'cut kill' cannot be used to refer to the killing of a person in a stampede, or killing of something or someone by a non-human subject. For such situations, the specific verb which describes the act is selected. Some of the different verbs with which *khri* 'kill' can occur are shown below.

dù-khrì	kill by cutting
zè-khrì	kill by piercing
thë-khrì	kill by burning
gü-khrì	kill by hanging
pèlhï-khrì	kill by chocking
nyö-khrì	kill by running-over
pề-khrì	kill by shooting
kèdë-khrì	kill by walking over
vǜ-khrì	kill by hitting
tà- khrì	kill by biting
thù-khrì	kill by hitting
bề-khrì	kill by boiling
tele-khri	kill by pinching

2

<sup>&</sup>lt;sup>27</sup> The special status of  $d\hat{u}$ - $khr\hat{i}$  is also seen in the written form /orthography of Tenyidie. Whereas all the other forms of constructions such as ta khri 'bite kill', thu khri 'hit kill',  $v\ddot{u}$  khri 'beat kill' etc. are written with a gap in between the two components,  $d\hat{u}$  and  $khr\hat{i}$ , is always written as one word without any gap in between.

It is possible to cause death in ways other than those shown above and the verb *khri* 'kill' serializes much more productively. Presumably, it can occur with all activity or action verbs if the action expressed by the verb can cause death. The same principle applies to a lot of other verbs. Thus verbs like *phrò* 'break', *rho* 'dismantle' *wi* 'bent' *de* 'deform' *pha* 'beak', riè 'pluck', etc can occur with many initials like *khri* 'kill'. Some of these verbs have an independent existence, but that does not affect their productivity.

The initial verbs like  $v\dot{u}$  'hit', ta 'bite', ze 'pierce' etc. can also be followed by many other semantically compatible verbs. The claim is attested by the following serialized verb form:  $v\ddot{u}$  phro, 'hit break (a glass-like substance)',  $v\ddot{u}$  khri 'hit kill',  $v\ddot{u}$  tshe 'hit break (a stick like substance)',  $v\ddot{u}$  the 'hit break (a rope-like substance)',  $v\ddot{u}$  the 'hit deform',  $v\ddot{u}$  the 'hit fall',  $v\ddot{u}$   $v\ddot{u}$  'hit bend',  $v\ddot{u}$  the 'hit destroy'  $v\ddot{u}$  the 'hit tear (a cloth-like substance)'. Serial constructions involving the 'kill' are comparatively larger than those with the initial  $t\ddot{u}$  'hit'. This seems to reflect the semantic properties of the two verbs, that there are potentially more ways of causing death than the number of accomplishment one can usually achieve through the act of hitting.

Nuclear layer serial verb construction is considered as one of the widespread features of verb-final serializing languages. In Tenyidie, most of the semantically complex verb especially the externally caused events are expressed in SVCs, and many of them surface as nuclear layer serialization.

#### 4.5. Serial Verb Construction as a Cultural Construct

Despite the similarities in the human environment and experience, languages differ in making a distinction between types of events. As Durie (1997:321) observed, some languages have richer verbal vocabularies in some domains while others make a more delicate distinction in some other domains. A speech community's attachment to different activities or the cultural significance of the different events decides and determines how a conceptual event is represented. The way societies conceptualize event structure, and they way it is represented lends strong support to what Jarkey (2010) says about language and culture, and I quote him:

"It [conceptual event] is a cognitive construct in that it is a means by which we deal with our temporal experiences as a metaphor of the way we deal with our physical

experiences. Just as we classify our physical world into discrete entities, so we classify our temporal world into discrete events. At the same time, a conceptual event is also a cultural construct in that, while our common cognitive make-up results in significant commonalities in what can constitute an event token across languages, cultural differences can result in variation with regard to precisely what are considered the salient boundaries of eventhood in some cases." (Jarkey 2010:112)

The claims made above explains the presence of a single lexical verb in a non-serializing language to represent a particular situation which in the serializing is represented by two or more verbs and the codification of a particular situation by the speech community as a salient distinct event type. If we look at the different verb sequence in the light of the all these observations, the ungrammatical constructions find their proper explanation. For instance, (61a) and (61b) – from Sranan – differ in acceptability despite having similar syntactic structure. Here the ungrammatical sentence finds its explanation from sources other than syntax, that is, the sentence is unacceptable because the meaning does not correspond to a recognizable event-type. Likewise, in Tenyidie, (62a) is acceptable but (62b) is not, and the only plausible explanation one can give is that, in the ungrammatical sentence, the sequencing of events or the verb combination violates the permitted pattern.

- (61) a. A teki a fisi seri s/he take the fish sell 'S/he sold the fish'
  - b. \*a teki a fisi bay s/he take the fish buy

(Sheba 1987:60)

- (62) a. A leshü u pie kevie wa tuo

  1SG book DET hold hide PFV FUT

  'I will hide the book.'
- (62) b. \*A leshü u pie khrü lie tuo
  1SG book DET hold buy take FUT
  'I will buy the book.'

What we can conclude from all these is that in serializing languages, situations like the ones described in (61a) and (62a) are conceptualized as a single event and the meaning one gets is similar to that of a clause built around a single verb in a non-serializing language.

#### 4.6. Clausal Tests

The fact that a particular construction qualifies as a serial verb shows that it is a monoclausal construction, and testing them again for clausal structure seems unnecessary here. But to make sure that all the different kinds of constructions shown above are monoclausal construction, they are put to a single test each again. Of the seven different serial verb constructions, resultatives, and causatives are shown as monoclausal constructions in the previous chapter. The other five are tested below.

**Multi-event serial verbs**: In Section 4.4.1, I have shown that multi-event serial verbs construction allows NP extraction. In (63), I show another verb sequence of a multi-event type which allows extraction of the shared object. The fact that (63a) can be questioned by an interrogative sentence in (63b) indicates that the verbs in series belong to the same clause. If the two verbs belong to a different clause, extraction would not have been possible because coordinate/subordinate clauses remain islands for extraction (Ross 1967).

- (63) a. Puo thedze u pu keyie shü.

  3SG story DET tell spread put

  'He spread the news verbally.'
- (63) b. Puo kedipuo pu keyie shü ga?

  3SG what tell spread put QP

  'What did he spread verbally?'

**Instrumental serial verbs**: Binding test in the following example shows that instrumental serial verbs qualify as monoclausal constructions. In the (64), the anaphoric element *puo thuo puo* is co-indexed with the subject *Neihu*. This indicates that the verbs in the constructions belong to the same clause.

(64) Neihu<sub>i</sub> zhie pie puo-thuo-puo<sub>i\*j</sub> du wa te neihu knife hold 3SG-self-3SG cut PFV PRF 'Neihu cut himself with a knife.'

**Dative serial verbs**: Like the objects in the multi-event serial verbs, the shared object in the dative sentences permit extraction by WH question. The object NP *chenü* 'sweets' in (6a) can be extracted by an interrogative sentence (65b).

- (65) a. Nyabou chenü khrü pie a tsü nyabou sweets buy hold 1SG give 'Nyabou bought me sweets.'
  - b. Nyabou kedipuo khrü pie n tsü ga?nyabou what buy hold 2sG give QP'What did Nyabou buy for you?'

Comitative serial verbs: In the following example, the verb *ze* 'be with' and *vor* 'come' behave as a single syntactic unit. As in any other ordinary transitive sentences, the pronominal element *puo* in the object position is free – there is no way it can be coindexed with the subject *Niu*. The sentence does not show any feature of a bi-clausal construction.

(66) Niui puoj\*i ze vor
niu 3SG take/receive come
'Niu brought him / came with him.'

**Directional serial verbs:** As in the multi-event serial verb construction, directional serial verb also allow the extraction of the object NP as shown in (67a) and (67b) – the object *si* 'firewood' in (96a) can be questioned using a WH question *kedipuo* 'what'.

- (67) a. Vilie si pfü vorvilie book carry come'Vilie brought (fire) wood (in his basket).'
  - b. Vilie kedipuo pfü vor ga?vilie what carry come QP'What did Vilie brought?'

#### 4.7. Conclusion

Serial verbs show up differently in different languages. Even to denote a very common concept like *kill*, languages employ different means as shown in section 4.5.1. They often "look alike structurally, but on deeper probing turn out to exhibit very divergent properties" (Foley 2010:107). As Unsaldo (2006) remarked, defining serial verbs is a 'complex enterprise.'

Many have noted that cross-linguistically, and even within a language, serial verbs occupy different places on the continuum; between one indissoluble event and a series of subevents all linked together. At one end, the verbs have almost independent verbal status and at the other end the constructions are more like frozen idioms (Dechaine 1993; Bamgboşe 1974; Kachru 1993 and Aikhenvald 2006). Tenyidie is no exception. At one end, there are expressions like *kotari pie nhasi le* 'knife hold fruit peel' ('peel the fruit with a knife') in which each verb occurs with its own complement. At the other end, there are verb sequences like *du khri* 'cut kill', *vü phro* 'hit break' where the different components occur as bound morphemes, and function together as a unique word. In between, there are constructions like *cha cü* 'cook eat' *ta vor* 'run came' which permits adverbial modifiers in between, but the verbs have same arguments.

Durie (1997:321) writes: "the verbal system of a language evolves as a categorization of the event-types that are salient, or communicatively in demand for the speech community. Sub-communities develop their own sub inventories for verbs, to distinguish salient event-types of significance to them." Looking at the kinds of events serial verbs describe, it is tempting to agree with Durie and say that serial verbs describe what are conceptualized as a single event, base on culture-specific construction of eventhood.

## Chapter 5

## Noun Incorporation in Tenyidie

#### 5.1. Introduction

There is a phenomenon in which a verb and a nominal element show a closer-than-usual relation and serve as a predicate of a clause. The phenomenon is called Noun Incorporation (NI). It is found in a wide range of genetically unrelated languages scattered throughout the world. It is considered as one of the salient properties of the polysynthetic languages, most widespread in North America. There are cross-linguistic variations concerning the shape and position of the nominal expressions involved, and the degree of cohesion between the constituent stems differ from language to language. As Mithun (1984) observed, even within a language, NI constructions appear in different forms exhibiting different properties.

In this Chapter, I look at the noun-verb sequences in Tenyidie to see if they come under the rubric of Noun Incorporation. The Chapter is arranged in the following order. Section 5.2 presents a brief overview of the phenomenon of noun incorporation. Based on the properties the incorporated nominals in other incorporating languages exhibit, I argue in Section 5.3 that Tenyidie is an incorporating language. Section 5.4 is on the incorporation of dummy roots. In Section 5.5, incorporation and weather predicates are explained. Section 5.6 deals with the incorporation of the different body parts. Section 5.7 is on noun incorporation and denominal verb constructions. Section 5.8 is on noun incorporation and institutionalized activity, and in Section 5.9, incorporated constructions are shown as possessing idiomatic sense. In Section 5.10, I look at the debate between noun incorporation as a lexical process and noun incorporation as a syntactic process. Section 5.11 sums up the chapter.

# 5.2. Noun Incorporation: An Overview

In a non-technical sense, the term 'incorporation' is used for "constructions in which a verb and one of its arguments form a particularly tight unit" (Farkas and de Swart 2003:1). Since Kroeber 1909 and Sapir 1911 – two early notable works on the topic – Noun incorporation has been in the literature, and it still continues to interest linguists as it deals

with issues concerning the relationship between lexicon, morphology, and syntax. Based on the morphological and syntactic evidence about the shape and position of the nominal expression involved, NI constructions are usually identified. As shown in Mithun 1984, the cohesion between the elements involved differs from one language to another. In some cases, the constituents get fused and their individual identity becomes blurred or is lost completely. In some constructions, the constituents retain their formal identity as separate words. Examples (1b) and (2b) show how the structure of incorporated constructions generally looks like. (1a) and (1b) are from Niuean taken from Rosen 1989, and (2a) and (2b) are from Inuit taken from Mithun 1984.

- (1) a. Takafaga tu:mau ni: e ia e tau ika
  hunt always EMPH ERG he ABS PL fish
  'He's always hunting fish.' (= He's always fishing)
  - b. Takafaga ika tu:mau ni: a ia.
     hunt fish always EMPH ABS he
     'He's always fish-hunting.' (= He's always fishing.)
- (2) a. Po 'o afea e tausi ai e ia tama?

  Q PRED when TNS care PRO ERG he child

  'When does he take care of children?'
  - b. Po 'o afea e tausi-tama ai 'oia?Q PRED when TNS care-child PRO ABS.he'When does he baby-sit?'

In both (1a) and (2a), the verbs are transitive and the subjects have an ergative case as expected. In (1b) and (2b), the transitivity of the verb is affected due to incorporation and the subjects have an absolutive case. The shape and position of the incorporated nominals are also affected. In (1b) the nominal is reduced to a bare stem. There is no determiner, no case marker or number marker or nominal modification of any sort. In (2a), the verb and its object are separated by a case morphology, the progressive aspect marker, and the subject, but in (2b), the incorporating verb and its object came together and formed a VN unit.

According to Mithun (1984), a number of languages have constructions in which a V and its direct object are simply juxtaposed to form an especially tight bond. The V and N

remain separate words phonologically; but as in all compounding, the N loses its syntactic status as an argument of the sentence, and the VN unit functions as an intransitive predicate. She cites the following examples to prove her point.

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(3) a. Gu bea chuwqiy ea mareaw.

I PRES buy CONN copra
'I am buying copra.'

b. Gu bea chuwaay' mareaw.

I PRES buy copra
'I am copra-buying .' (Mithun 1984:850)
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Referring to (3b), she says that the predicate with incorporated object 'copra' indicates unitary, institutionalized activity of copra-buying where the object does not refer to specific copra, but simply modify the type of activity under discussion. Quoting Harrison (1976), says that "the addition of the noun refines the meaning of the verb in question, limiting its application to the set of objects named by the noun" (Mithun (1984: 850). She further says that the constructions of this type are generally used to describe activities or events whose patients are neither countable nor specific, activities done by several people together etc. Referring to constructions such as, 'baby-sitting', 'mountain-climbing', and 'berry-picking' she says that even though English does not have [v N+V] compounds, the nominal element in these constructions show properties similar to the incorporated nominals. For instance, in 'He is out berry-picking', the word *berry* does not refer to a specific berry but 'qualifies the V, describing the type of picking in progress' (Mithun 1984:871).

In Lakota, there is a phenomenon called *Noun Stripping* where the nominal element is stripped of the articles, determiners, and case-marking elements that usually accompany it, and then juxtaposed it to the verb. According to de Reuse (1994), construction of this type functions like noun incorporation. He equates it with NI base on the semantic properties these constructions exhibit.

Massam (2001) says that under certain circumstances, such as when there is a lack of specificity on the object argument, the argument shows a tendency to develop a closer-than-usual relation with its verb, and the predicate-argument distinction breaks down. Based on the observation that not only  $N^0$  but even NPs in Niuean show this general tendency, she argues

that Niuean has Pseudo Noun Incorporation (PNI). Examples (4a) and (4b) below show how a non-incorporated structure and pseudo noun incorporation construction look like in Niuean.

- (4) a. Ne kai e Sione e tau talo aki e huki
  Pst eat Erg Sione Abs P1 taro with Abs fork
  'Sione ate the taros with a fork.'
  - b. Ne inu kofe kono a Mele.Pst drink coffee bitter Abs Mele'Mary drank bitter coffee.' (Massam 2001:158)

As shown in (4a), the non PNI sentences in Niuean have the order V-Prts-Sbj-Obj. In (4b), *kofe kono* 'coffe bitter' is incorporated and the word order changes to V-Obj-Prts-Sbj. The Agent (which has an ergative case in non PNI) is marked with the absolutive case, indicating that the sentence is intransitive. An important observation Massam (2001) makes here is the 'lack of referentiality of the NP in PNI'. The non-referential nature of the incorporated nominal expression in (4b) which bears the internal theta role ensures a non-delimited or an unbounded or reading of the event, providing the frequentative or habitual interpretation for PNI constructions (Massam 2201:171).

According to Dayal (2011:1), Hindi has a very liberal kind of Pseudo-Incorporation "involving noun phrases rather than nouns." The incorporated nominal behaves like a syntactic complement, triggering verb agreement thereby showing the transitivity nature of the verb. In both Hindi and Niuean, and also in all the other incorporating languages, what we see is a restriction of elements such as determiner, case markers and relative clause (elements that usually occur inside a DP) to appear in an incorporated construction.

Apart from the morphological and syntactic properties described above, incorporated nominals exhibit certain semantic properties. Drawn from sources such as Hindi and Hungarian, Farkas and de Swart (2003) discuss in detail the semantic properties associated with noun incorporation and make the following observations:

"A cross-linguistically stable property of incorporated nominals that has been noted from the earliest work is their inability to take wide scope over other elements in their sentence." (Farkas and de Swart 2003:3)

"The literature on incorporation shows that number neutrality is a cross-linguistically stable property of morphologically singular INs, as discussed in Van Geenhoven (1998), Dayal (1999), and Chung and Ladusaw (2003)." (Farkas and de Swart 2003:7)

Another property associated with incorporated nominal which they noted is the discourse reference. In a discourse, it is usually the case that referents are introduced by determiners, proper names, and pronouns. In constructions with full-fledged DPs, the discourse referent is bound by the referent introduced by a determiner, and in the process of combining a determiner with an NP, and a DP with the VP, the thematic arguments of the predicates are bound to the relevant discourse referent introduced as part of the interpretation of the DP. In many of the incorporating languages, bare nominals do not serve as discourse referent. They are discourse opaque, that is, they do not act as antecedents for pronouns in a subsequent discourse.

As Baker et al. (2005) observed, noun incorporation is not a strictly unified phenomenon, and the markedness varies from combination to combination and language to language. There are aspects or properties which vary across languages. For instance, in some combinations, the incorporated noun has an external modifier like demonstrative and numerals, while in some, no such modification is permitted. Despite the differences, NI constructions across languages share numbers of properties. Some of such properties are given below.

- The direct object is the typical target of incorporation
- Relatively generic NPs with no particular reference are generally incorporated.
- The markers of definiteness, or number, or demonstratives do not occur within the complex verb (incorporated construction), therefore the incorporated nominal loses its individual salience both semantically and syntactically. It no longer refers to a specific entity.
- Incorporated constructions generally denote unitary or institutionalized activities.
- The subjects of transitive verbs and unergative verbs are not incorporated.
- Generally, proper names and pronouns are not incorporated.

Based on the properties given above and other semantic properties such as the number neutral interpretation of the incorporated nominal, its inability to support a discourse anaphora, and its narrow scope reading, I show in the following section that a lot of constructions in Tenyidie qualify as NI constructions.

### 5.3. Identification of Noun Incorporation in Tenyidie

On the surface, Tenyidie does not look like an incorporating language. As in Hindi, there is no discernible morphological fusion between the constituents involved, and except for a brief comment by Giridhar (1992 and 2011), no one, to my knowledge, has either called it as an incorporating language or did a careful study of the phenomenon. However, a careful examination of the data clearly indicates that it is indeed an incorporating language. To show how the incorporated constructions look like and how they differ from the non-incorporated constructions, (5) and (6) are shown below. Though the sentences differ only minimally, there is a significant difference in their interpretations. In (5) the bare nominal *leshii* 'book' in the object position and the verb exhibit a 'closer-than-usual' relationship, and the construction gives two different readings; 'Sazo is studying' and 'Sazo is a student.' In (6) the object position is occupied by a noun phrase *leshii puo* 'one book' which appears as a usual complement, and there is only one reading. Constructions like (5) are treated as a case of noun incorporation here.

- (5) Sazo leshü phrü basazo book read sitA 'Sazo is reading book (studying).'B 'Sazo is a student.'
- (6) Sazo leshü puo phrü ba sazo book one read sitA 'Sazo is reading a book.'B \*'Sazo is studying.'

In Tenyidie, verbs do not agree with any of their arguments, and the nominative case and accusative case are not overtly indicated except in the first and the second person singular pronoun. Since agreement and case morphology do not indicate anything with regard to noun incorporation, one has to look at other properties to see the difference between the incorporated and non-incorporated constructions. The detailed description of the four different properties seen in the incorporated constructions in other languages is given below<sup>28</sup>.

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<sup>&</sup>lt;sup>28</sup> Incorporation in Tenyidie looks like the incorporation of bare singular nominal in Hindi in many respects – as shown in Dayal 1999, 2011. I will, therefore, compare the two languages often to drive home the point.

#### 5.3.1. Bare Nominals and Number Neutrality

One of the visible or commonly seen features of NI constructions is the use of bare nominals. In most incorporating languages, the nominal drops the noun class affixes, that is, it is reduced to a bare stem when incorporated. None of the affixes associated with the noun in a noun phrase – determiners, case markers, number markers – enter the incorporated structure. It is due to this reason that incorporated nouns differ in "referential modality from unincorporated nouns" (Sullivan 1984:142). Referring to the incorporated nominals in Hindi, Dayal (2011) says that it is only the non-case marked nominals that represent instances of incorporation. The accusative case marked direct object or the quantified DPs refer to contextually salient/unique entities, that is, they are interpreted as definite and are therefore counted as normal complements. Example (7) below illustrates the claims.

(7) anu bacca/ bacce-ko sambhaaltii hai anu child child-ACC look-after-IMP be-PRS

'Anu looks after (one or more) children/the child' (Dayal 2011:5)

Dayal (2011) says that the singular noun *bacca* in (7) is not restricted to a unique individual and it can mean one or more children. Since objects are the canonical targets for incorporation, and number neutrality is a feature of incorporation, she says that one can conclude that the non-unique/number neutral interpretation of Hindi bare singular is due to incorporation.

Unlike Hindi, bare nouns in Tenyidie do not carry number specification. They only have what is known as "general number" (Corbett 2000), and separate morphemes are used for number specification. In the absence of these markers, nominals are always number neutral in their denotation. Nominals in the direct object position do not appear with overt case morphology either, therefore in the absences of determiners, number markers, and other modifiers, they function like bare singular nominals in Hindi. This is seen in the examples given below.

(8)a. Hieko ndu chü u whuo

1PL yesterday meat DET chase

'We chased the animal yesterday.'

b. Hieko ndu chü whuo1PL yesterday meat chase'We did hunting yesterday.'

In (8a), the NP in the object position has a determiner, but in (8b), the nominal element in the same position is a bare noun. In the former, the determiner or the singular definiteness marker u indicates that the nominal  $ch\ddot{u}$  'meat' refers to a contextually salient/ unique animal. There is no number neutral reading in this sentence. In (8b) on the other hand, the bare noun  $ch\ddot{u}$  'meat' does not have any specific reference and the sentence does not say anything about the number of animal the speaker chased or hunted. It is only in this kind of sentences that one gets a number neutral reading. The number neutral reading or the loss of uniqueness in the denotation of the nominal here can be attributed to incorporation.

The same explanation holds for (9a) and (9b) below. In (9a), the bare noun *lie* 'field' has the number neutral reading, that is, Viu could be cultivating any number of fields. In (9b) on the other hand, the indefinite article *puo* 'one' clearly quantifies the noun *lie* 'field' and there is no ambiguity with regard to number. The first sentence means Viu is a farmer by profession, but from the second, nothing about Viu's occupation can be inferred as the noun phrase functions like any other quantified DPs.

(9) a. Viu lie cie yaviu field cultivate HAB'Viu does cultivation'

b. Viu lie puo cie yaviu field one cultivate HAB'Viu cultivates one field.'

The absence of noun class affixes not only leads to number neutral reading but also triggers other syntactic behaviours peculiar to NI constructions. Other syntactic and semantic properties develop as an offshoot of this property.<sup>29</sup>

<sup>&</sup>lt;sup>29</sup> Here it should be mentioned that not all the bare nominals that occur in the object position are incorporated.

#### 5.3.2. Incorporated Nominals and Discourse Transparency

Nominals that serve as antecedents to pronouns in a discourse are considered discourse transparent, while those that do not are considered discourse opaque. Discourse transparency depends on the composition of nominal elements involved, and since languages differ in encoding information related to case number and person, there is a cross-linguistic variation with regard to discourse transparency.

Farkas and de Swart (2003) observed that discourse referent in the context of a full-fledged DP is introduced by the determiner. In the case of bare plurals, the interpretation of plural morphology presupposes discourse referent; as such the incorporated plural nominals are discourse transparent. Variation arises when bare singular nouns are incorporated. In languages like Hindi, the bare singular noun in an incorporated sentence does not support 'pronominal discourse anaphora' as shown in (10). The two sentences are incompatible because the bare singular noun *kitaab* 'book' and the pronominal *vo* 'it' cannot be coindexed (Dayal 1999).

(10) anu kitaab<sub>i</sub> paRh rahii hai. \*vo<sub>i</sub> bahut acchii haiAnu book read-PR-PROG It very good be-PR'Anu is reading a book. It is very good.' (Dayal 1999:36)

Even though English is not an incorporating language, we see a similar restriction in some noun verb sequence. In (11a) *apple* in the first sentences can neither be co-indexed with the pronoun *they* nor with *the apples* in the subsequent sentence. Similarly, the noun *cake* in (11b) cannot be coindexed with the subject *it* or *the cake* in the following sentence.

(11) a. Mary went apple-picking. \*They/The apples were delicious.

b. John baked yesterday. \*It/The cake was delicious. (Dayal 2011)

In Hungarian the discourse status of singular incorporated nominals is ambiguous, that is, they are opaque when they serve as the antecedent of an overt pronoun, but they are transparent when they antecede a null (or covert) pronouns<sup>30</sup>. In other languages, such as West Greenlandic, singular INs are discourse transparent as shown below.

(12) A-ani qimmi-qar-p-u-q Miki-mik ati-qar-p-u-q

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Due to this ambiguity Farkas and de Swart (2003) call the singular INs as discourse translucent

A.ABS dog-have-IND-[-tr]-3Sg. M.-inst name-have- IND-[-tr]-3Sg 'Aani has a dog<sub>i</sub>. It<sub>i</sub> is called Miki.'

(Farkas and de Swart 2003:72)

In Tenyidie, bare nominals are always discourse opaque. This is shown in the examples below. In (13), *leshü* 'book' does not serve as an antecedent for the pronoun *suü* 'that', and *chü* 'meat' does not antecede the pronoun *süko* 'those' in (14).

- (13) Puo leshü<sub>i</sub> phrü ba. \*Süu<sub>i</sub> vi se

  3SG book read sit that good very

  'She is reading book (studying)'. 'It is very good'
- (14) Puo ndu chü<sub>i</sub> whuo. \*Süko<sub>i</sub> zha se se

  3SG yesterday meat chase those big very very

  'Yesterday he chased meat (hunt animal). 'They were very big'

In both the examples, co-indexation fails because the nominals do not agree in number. While the bare nominals are number neutral, the pronouns  $s\ddot{u}u$  'that' in (13) and  $s\ddot{u}ko$  in (14) are not. The nominal elements in the constructions above simply modify the type of activity under discussion and they do not have any specific reference. Therefore, they do not antecede the subsequent pronoun. These examples clearly show that in Tenyidie, in the absence of determiners, nominals do not introduce discourse referent.<sup>31</sup>

The incompatible sentences in (13) and (14) can be can be corrected by adding a determiner to the bare nominals. The addition makes the nominal element transparent as shown in (15) and (16), but as full DPs, *leshü puo* 'a books' and *chü puo* 'one meat', appear as normal complements and not as incorporated nominals anymore. This proves another of Farkas and de Swart's (2003) claim, that, referents are standardly contributed by determiners, proper names, and pronouns.

(15)Puo leshüi puo Sü-ui phrü ba. vi se 3SG book one read sit that-SG good very 'She is reading a book. It is very good

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The term determiner is used as a cover term for morphemes such as articles, nominal quantifiers and numerals which occur in the determiner position.

(16)Puo ndu chüi whuo. Sü-ui zha puo se 3SG yesterday meat one chase that-SG big very 'Yesterday, he chased a meat. It was very big.'

### 5.3.3. Narrow Scope and the Incorporate Nominals

According to Farkas and de Swart (2003:3) one of the cross-linguistically stable properties of incorporated nominals that has been noted from the earliest work is their "inability to take wide scope over other elements in their sentence." Works on noun incorporation in a variety of languages have shown that incorporated nominals are scopally inert, that is, they scope with the predicate and, therefore, do not have wide scope relative to any operator or quantifier in whose scope the predicate occurs. Hungarian provides us with a reliable way of identifying this feature because normal complements appear postverbally while incorporated nominals precede the verb. Example (17a) is ambiguous. Under the wide scope reading of the indefinite, there is a particular poem Mary has to read. Under the narrow scope reading, Mary fulfils her obligation if she reads any poem. In (17b) the nominal element precedes the verb and the sentence has only one reading, which is the narrow scope reading.

(17) a. Mari kell olvasson egy verset.

Mari must read. Subj. a poem. Acc

'Mary must read a poem.'

b. Mari verset kell olvasson.

Mari poem. Acc must read. Subj.

'Mari poem must read.'

'Mari must read a poem /poems.'

(Farkas and de Swart 2003:7)

One sees a similar situation in Hindi. The only possible interpretation of (18a) is that Anu will not look after any children. In (18b), the overt indefinite form is interpreted with the existential taking scope over negation. The case marked object has a definite reading indicating that there is a particular child that Anu will not look after (Dayal 2011).

(18) a. Anu bacca nahiiN sambhaalegii

Anu child not look-after-FUT

'Anu will not look after children.'

b. Anu ek bacce-ko / bacce-ko nahiiN sambhaalegii Anu one child-ACC child-ACC not look-after-FUT

'Anu will not look after a particular child/the child.' (Dayal 2011:6)

In Tenyidie, bare nominals in the object position behave exactly like the incorporated nominals in Hindi and Hungarian with regard to scope. This is shown in (19b). In (19a) the existential takes scope over the negation, that is, there is a book which Vozo will not read. In (19b), *leshii* 'book' does not scope over the negation. The narrow scope reading – that Vozo will not read any book –gets a noncompositional meaning that Vozo will not study.

- (19) a. Vozo leshü puo phrü lho
  vozo book one read FUT.NEG
  'Vozo will not read a/one book.'
  - b. Vozo leshü phrü lhovozo book read FUT.NEG'Vozo will not read book (study).'

An obligatory narrow scope is also said to be a stable cross-linguistic property of bare nominals and therefore it is not a very reliable test, but it does lend support to the claim that example (19b) is a case of noun incorporation.

### 5.3.4. Wh-questions and the Incorporated Nominals

Mohanan (1995) argues that the animate NOM object in Hindi, like the one shown in (20a), functions like the object of the verb and at the same time forms a morphological unit with the verb, that is, it forms a lexical category with the verb. He calls this an instance of noun incorporation. He further says that the object here cannot be questioned as the wh-words and pronouns – which are widely accepted as maximal projections – do not participate in an NI structure. This explains why (20a) is grammatical but (20b) is not.

(20)a. ilaa bacee k<sup>h</sup>ojtii Rahtii hai?

Ilaa-N children-N search-HAB PROG be-PR

Ila keeps children searching (i.e., perform the act of searching for children)

b. \*ilaa kaun k<sup>h</sup>ojtii rahtii hai?
 Ilaa-N who-N search-HAB PROG be-PR
 'Who does Ila keep searching for?' (Mohanan 1995:78)

di Sciullo and Williams (1988) also says that syntactic atomicity holds of all words and only of words — which include words formed by affixation, as well as those formed by compounding. As such NI Constructions are immune from the syntactic/phrasal rule such as wh-extraction.

The nominal elements within the constructions which I claim as NI constructions in Tenyidie cannot be questioned by a wh-question. In (21), *thenu* 'female' is incorporated by the verb *lie* 'marry', and the combined form behaves as a single unit. The incorporated nominal here cannot be questioned as it behaves as part of the verb and not as its syntactic object. The sentence is correct as a declarative sentence but inappropriate if it is said in response to a WH-question in (22). For a question like this, the answer has to have a definite object as in (23). The inability to question the nominal element here shows that the verb and the incorporated noun together function as a single syntactic unit.

- (21) Viu thenu liề liè te viu female marry take PRF 'Viu got married.'
- (22) Vozo supuo lië liè te ga?
  vozo who marry take PRF QP
  'Whom did Vozo marry?'
- (23) Vozo Neinuo liè liè te
  vozo neinuo marry take PRF
  'Vozo married Neinuo.'

It is said that in Tswana and a number of other Bantu languages, there is a 'male chauvinist' term for the verb 'marry', which selects only male nouns as subject and female noun as objects (Givon 1976: 326). Tenyidie has three different terms for the verb 'marry'; *lie* selects only male noun as its subject and female noun as its object, *nhyü* is an intransitive verb and it selects only female subject, and *keri* is also an intransitive verb and it selects only coordinate NPs or dual pronoun as its subject. When the verb *lie* selects a pronoun or a proper name as its object as in (23) above, the object occurs as a proper syntactic object. When it

selects *thenu* 'female', it incorporates it and the form *thenu-lie* behaves as a complex verb. Like the intransitive verb *nhyü* 'to marry' in (24) which selects only female human noun as its sole argument, *thenu-lie* 'to marry' also behaves as an intransitive verb with a male human noun as its sole argument.

(24) Neinuo nhyü te neinuo marry PRF 'Neinuo got married.'

The same interpretation holds for (25a). The noun  $dz\ddot{u}$  'water' in this sentence cannot be extracted from  $dz\ddot{u}$ - $v\ddot{u}$  by a WH-question, that is, (25a) cannot be said in response to the WH-question in (25b). The components form a single syntactic unit, describing an institutionalized activity.

- (25) a. Hieko ndu dzü vü

  1PL yesterday water beat
  'We swam yesterday.'
  - b. Nieko ndu kedipuo vü ga?3PL yesterday what beat QP'What did you beat yesterday?'

Besides the properties discussed above, the constructions which I consider as NI constructions in Tenyidie exhibits other properties associated with NI constructions in other languages. For instance, and in all the examples shown above, only the direct object is involved. There are cases where the subjects are incorporated, but those subjects are the subjects of unaccusative verbs and not of unergative verbs or transitive verbs – incorporation by unaccusative verbs is described in Section 5.5. It is also said that proper names and pronouns are not incorporated. None of the constructions above involves proper names or pronoun. NI constructions generally denote institutionalized or unitary activities, and they often get an idiomatic sense. The incorporated structures such as *leshü-phrü* 'book-read', *chü-whuo* 'meat-chase', *thenu-lie* 'female-take' etc. denote institutionalized activities and they often get idiomatic sense – these points are explained in detail in Section 5.8 and Section 5.9 below. Adjacency between the incorporated nominal and the incorporating verb is seen in all the examples.

## 5.4. Incorporation of Dummy Root

In all the examples shown so far, the incorporated nominal is always a genuine noun. Tenyidie has another kind of incorporation; incorporation of dummy root *mha* 'thing' which is a little different from those described above. I call the process as incorporation of the dummy root – following Johns (2007) – because the nominal element involved does not have any specific reference even outside incorporation. It can be called as the most generic of the nominals that are incorporated. The following examples show that the nominal element occurs as a dummy object to satisfy the transitivity requirement of the verb.

- (26) a. Puo **mha** le ba

  3SG thing think sit

  'He is thinking (something).'
  - b. Puo mha cü ba3SG thing eat sit'He is eating (meal/something).'
  - c. Puo mha chü ba3SG thing do sit'He is working (doing something).'

Like the other incorporated nominals, *mha* 'thing' exhibits properties of an incorporated noun, such as number neutrality as in (27), narrow scope as in (28), and discourse opacity as in (29).

- (27) Puo mha cha shü

  3SG thing cook put

  'She cooked thing (She cooked one dish /several dishes).'
- (28) Puo mha cha mo3SG thing cook NEG'She did not cook thing (she did not cook anything).'
- (29) Puo mha<sub>i</sub> cha ba. \*Süu<sub>i</sub> a sevor 3SG thing cook sit That 1SG bring 'She is cooking thing. I brought that.

As observed by Giridhar, (1991) *mha* 'thing' occur as a 'componential part of the verb' and not as its syntactic object, and is, therefore, invisible to syntactic process like WH-question – Giridhar calls *mha* 'thing' a 'generic pro-form'. As a denotative sentence, (30a) is completely acceptable, but to use it in response to an interrogative sentence like (30b), it is inappropriate.

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(30) a. A mha tsü

1SG thing eat
'I ate meal'
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b. No kedipuo tsü ga?2SG what eat QP'What did you eat?' (Giridhar 1991:50).
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Tenyidie is not the only language where incorporation of dummy root is found. In Greenlandic, according to Saddock (1980), some denominal verb-forming suffixes incorporate its object and form an intransitive predicate. When these verb stems occur as an independent verb without an object, they are added, an empty stem, pi-, which is glossed as 'thing'. The incorporating verb stems are never pronounced in isolation. The incorporated object is always understood as indefinite as it does not agree with the incorporating verb. Examples are shown in (31) - (33) below.

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(31) a. qimmeq 'dog'
qimmeqarpoq 'He has a dog.'
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- b. **pi**qarpoq 'He has something.' thing-have-INDIC.-3sg.
- (32) a. sapangaq 'bead'
  sapangarsivoq 'He bought beads.'
  - b. **pi**sivoq' He bought something.' thing-get-INDIC.-3sg.
- (33) a. nerrivik 'dining table'

  nerriviliorpoq 'He set the table.'
  - b. **pi**liorpoq 'He made something.'
    thing-make-INDIC.-3s (Sadock 1980: 306)

Referring to the nominal element pi in sentences like (31b, 32b, and 33b), Johns (2007) says that the dummy element is merged with the verb where there is no  $\sqrt{\text{ROOT}}$ , but is naturally prohibited in the presence of a genuine  $\sqrt{\text{ROOT}}$ . In Tenyidie, mha 'thing' functions like the dummy  $\sqrt{pi}$  in Greenlandic in that it occurs in an object NP position where a nominal root is found. However, when there is another nominal element in the object position, it does not show up. Example (34) is ungrammatical because there are two nominal elements in the object position.

(34) \*Puo galho mha cü
3SG porridge thing eat
'She ate thing porridge.'

Here, it looks as if the dummy noun appears just to satisfy the transitivity requirement of the verb, but as a nominal element, it can be quantified by an adjective as in (35). But when that happens, it ceases to appear as an incorporated nominal, and the modified NP behaves as a normal complement. This is shown in (35).

(35) Puo **mha** kevi cha ba
3SG thing good cook sit
'He is cooking good stuff.'

# 5.5. Incorporation and the Weather Predicates

Baker (1988) claimed that due to syntactic constrains, incorporation is barred from all positions except the internal argument position. In support of this claim, many writers have shown that the only subjects that are incorporated are the subjects of the unaccusative verbs (Thomson 1989, de Reuse 1994 among others). Incorporation of the subject of the unaccusative verb is possible because, the initial grammatical status of the sole argument of an unaccusative verb is generally analyzed as underlying direct objects – they originate from an internal argument position.

Again in Baker et.al 2005, it is claimed that weather verbs take un-agentive subjects like the unaccusative verb, as a result, they incorporate their subjects. Incorporation by weather verbs is found in many languages. For instance, in Paiute weather verbs incorporate

their subjects and about this, Sapir (1911:266) writes: "there exists in Paiute a number of intransitive verbs with incorporated noun subject; such verbs seem to have reference particularly to natural phenomena and states." In Ainu – a language spoken in Japan – subjects of intransitive verbs are incorporated, but again, this kind of incorporation is restricted to weather predicates (Shibatani 1990). In Tenyidie incorporation of the subject seems to be restricted the to weather predicates. But before I go into the facts of incorporation, I show that weather verbs qualify as unaccusative verbs.

Dasgupta (1988:693) classifies the monadic verbs in Bangla into unergative and unaccusative base on what he calls *Postal's Generalization*, which says "an unaccusative always prohibits (impersonal) Passive and unergative, in general, allow it." As shown in (36) and (37), the unergative verb 'run' and 'write' permit passives, but the unaccusative verbs such as 'bloom' and 'lost' do not permit passives as shown in (38) and (39).

- (36) aj dowRono gEche
  today run-Infl went
  'Today, it has been possible to run.'
- (37) aj kOekTa ciThi lekha gEche today some letter write-Infl went 'Today, it has been possible to write some letters.' (also acceptable with kOekTa moved)
  - (38) \*aj phoTa gEche
    today blossom-Infl went
    'Today, it has been possible to blossom.'
  - (39) \*aj harano gEche
    today get-lost-Infl went

    'Today, it has been possible to get lost.'

    (Daspupta 1988: 693)

In Tenyidie unergative verbs and transitive verbs freely allow impersonal passives, as shown in (40) and (41). Unaccusative verbs like pu 'blossom' and  $j\ddot{u}$  'lose' and verbs related to atmospheric events like  $r\ddot{u}$  'rain' and  $r\ddot{u}khrie$  'blow' on the other hand behave like unaccusative verbs in Bangla in prohibiting passives as shown in (42) to (45). This simple test shows that weather verbs can be grouped with the unaccusatives.

- (40) Thie chülievi di letter huo thu today possible CP letter some write 'It has been possible to write some letters.'
- (41) Thie chülievi di ta today possible CP run 'Today it has been possible to run.'
- (42) \*Thie chülievi di pu today possible CP blossom 'It has been possible to blossom.'
- (43) \*Thie chülievi di jü
  today possible CP lost
  'Today it has been possible to lost.'
- (44) \*Thie chülievi di rü today possible CP rain 'It has been possible to rain.'
- (45) \*Thie chülievi di rükhrie today possible CP blow 'It has been possible to blow.'

In Tenyidie, the commonest noun incorporated by weather verbs is the noun *tie*. Like the noun *mha* 'thing', this noun can mean many different things. As an independent noun, it can mean 'weather', 'heaven', 'sky' etc. as in (46). When it is incorporated, the sentence at once gets an atmospheric event reading. This is seen in examples (47) - (51).

- (46) Tei gei themvü ko heaven LOC star PLU 'Stars in heaven.'
- (47) Thie tei rükhrie se today sky blow EMP 'It was very windy today.'
- (48) Sodu tei rü tuo

tomorrow sky rain FUT 'It will rain tomorrow.'

- (49) Ndu tei le se yesterday weather hot EMP 'It was very hot yesterday.'
- (50) Tei mela ba te heaven lightening sit PRF 'It is lightening.'
- (51) Tei se ba te heaven thunder sit PRF 'It is thundering'

Among the nominals incorporated into weather predicate, *tie* is the most regular one but it is not the only one. Other nouns are also incorporated as shown in (52) and (53).

- (52) Prü krü ba te hail fall sit PRF 'It is hailing.'
- (53) Kimhu shü ba te cloud drag sit PRF 'It is cloudy/foggy.'

When uttered for the first time in a discourse, all the verb stems in the examples shown above do not occur without the incorporated nominal element, though in the subsequent utterance the incorporated element can be dropped. One can, therefore, say that in a weather predicate, incorporation is obligatorily in certain contexts.

# 5.6. Incorporation of Body Parts

Incorporation of body parts is a widespread phenomenon. On this subject, Mithun (1984) and de Reuse (1994) made two interesting claims and I quote them:

"One of the first aspects of NI to be noted by those studying the phenomenon was the high proportion of terms for body parts among IN's (cf. Kroeber 1909, Sapir 1911). This results in part from the frequent recurrence and natural cohesion of many activities affecting parts of the body, e.g. 'to hand-wash' or 'to tooth-brush." (Mithun 1984: 854)

"Nouns that can be marked for inseparable possession are body-part nouns and kinship. The semantic characteristics of body parts and kinship terms, in particular their frequent occurrence in characteristic activities, explain why they are prime candidates for NI." (de Reuse 1994:228)

As Evans (1995) noted, the syntactic treatment given to incorporated body parts vary considerably from language to language. In some languages, such as Matses, body parts appear as prefixes (Fleck 2006). In some languages, the incorporated body parts allow external modification in the form of the possessor, while in some other, the suppletive form is incorporated. In Tenyidie, incorporation of body parts can be divided into two different types. In the first type, the bond between the incorporated noun and the verb is much tighter, and incorporation is seen as a derivational process that creates new verb lexemes. Here, incorporation serves as a device for deriving lexical compounds to designate activities or state associated with a particular body part. They are like those constructions which are described in the literature as lexical incorporation (Evans 1995). The other type of incorporation has a more complex structure. There is a possessor-like element – I call it as semi-reflexive following Barrie and Alboiu (2007) <sup>32</sup> – which always precedes the incorporated nominal, and the constructions mostly describe emotional experiences. To some extent, the incorporated structure here looks like a case of "possessor stranding" (Baker 1988). The descriptions of the different types are given below.

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Barrie and Alboiu (2007) argue that 'semi-reflexive' (SRFL) is a morphosyntactically underspecified morpheme only marked for  $\pi$  (i.e., a person feature), which accounts for its syntactic versatility. Specifically, it can be inserted either as an indefinite/impersonal argument or as a copy of a phi-complete DP. They also say that the SRFL triggers obligatory noun incorporation in languages where this phenomenon is otherwise optional. Bonivillian (1994) also observed that in Mohawk, semi-reflexive is used when the verb signals a less control on the part of subject and or when there is a spontaneous result without stated agent. In Onondaga, according to Barrie (2011), the SRFL occurs with a variety of predicates especially when a predicate indicates inalienable possession, and or when there is a need to show ownership of the object.

Some of the examples of the first type are given below. The constituents are joined by a plus (+) symbol as opposed to the hyphen (-) between the constituents of the other type.

dze+dahand-beat 'to clap' hand-? 'to call by gesturing with hand' dze+za*phi+de* leg-? 'to stamp' mhi+rhoeye-? 'to open eye' mhi+teeye-? 'to blink' mhi+miaeye-? 'to close eyes' tsü+ge head-swing 'to shake head' head-? 'to node head' tsü+nyie tie+mamouth-? 'to close mouth' mouth-open 'to open mouth' tie+ga

The complex stems shown above are lexicalised, unproductive and non-compositional compounds. There is no other way of expressing the resulting meaning and no option of a paraphrase by omitting the incorporated nominal and having it appear as the external nominal. They are specialized semantic units or single lexemes that have to be learned rather than being put together spontaneously. They are all intransitive and the nominals involved are interpreted as executing the action or undergoing it (Evans 1995). Other features which characterise these constructions are: the incorporating elements such as *te* in 'wink' and *da* in 'clap' do not occur in isolation; the nominals cannot be modified independent of the verb and nothing can intervene between the components; all the nominals change their tone to mid tone, somewhat similar to using a suppletive form in the incorporated construction in other languages.

The second type of body parts incorporation differs from the ones shown above in the following ways: the incorporated nominal is obligatorily preceded by a semi-reflexive which is inserted as a copy of the *phi* features of the subject DP; the incorporating verbs can occur as independent verbs elsewhere; the incorporated structures describe different physical and emotional/mental experiences – the verb describes a state of the incorporated nominal which is located in the body and the subject as a whole is expressed as undergoing that state. Examples (54) to (56) exhibit these features.

(54) John puo nou mvü ba te

john his inside excited sit PRF 'John is excited.'

- (55) John puo nou suo ba te john his inside bad sit PRF 'John is sad.'
- (56) No n nou kemezhie hie

  2SG your inside suffer PROH

  'Don't worry.'

Literally, *nou* means 'inside', and outside incorporation, it can mean the inside of anything like the inside of a building, a container, a hole, etc. When it is incorporated, the construction at once gets [+human] and [+experiential] features, describing the mental and emotional state of a person. In (54) - (56), *nou* 'inside' is incorporated, and the semi-reflexive -*puo*- which is coreferential with the subject, indicates that the subject is the experiencer of the emotion/feeling described.

The examples look very much like (57), an incorporated construction in Akwesasne, where the body part -<sup>2</sup>nikuhl- 'mind' is incorporated (Bonvillian 1989). The semi reflexives *puo* in (54-56) and *ate* in (57) occupy the same position, that is, they both come in between the incorporated nominal and the subject. They both indicate that the subject is the experiencer of the state described.

```
(57) sata<sup>2</sup>nikuhli:yohst
s-ate- <sup>2</sup>nikuhl-i:yo-hst
you-rfx-mind-nice-cs
'have patience!' (Bonvillian 1989:351)
```

There are instances where *nou* 'inside' is possessed but not incorporated. The different coreferential possibilities clearly bring out the difference between such constructions and the incorporated structure. In both (58) and (59), *puo nou* 'its inside' has the same tone and structure and occupies the same position. The sentences, however, differ in coreference. In (58), *puo* refers to something else other than the subject and therefore it cannot be coindexed with the subject. Here the phrase *puo nou* 'its inside' is an independent possessive phrase, serving as the locative complement of the verb *le* 'enter', and there is no semi reflexive and no incorporation. In (59), which is an incorporated construction, *puo* and

*ruoko* are coindexed, and the sentence denotes an intransitive situation with the subject *Ruoko* as the sole argument.

- (58) Ruoko<sub>i</sub> puo<sub>j\*i</sub> nou le te ruoko 3SG.POSS inside enter PRF 'Ruoko entered inside (Lit. John entered its inside).'
- (59) Ruoko<sub>i</sub> puo<sub>i\*j</sub> nou suo ba te ruoko his inside bad sit PRF 'Ruoko is sad.'

In those sentences where the possessor and the possessee together function as a possessive DP, modifier freely occurs as in any other noun phrases. But in an incorporated construction, no such modification is possible. In (60) *puo dze* 'his hand' is modified by *kenie nie* 'both', however, modification of *puo nou* 'his inside' in (61) is not possible.

- (60) Ruoko puo dze kenie nie yha shü ruoko his hand two DUAL raise put 'Ruoko raised both of his hand.'
- (61) \*Ruoko puo nou pete suo ba te ruoko his inside all bad sit PRF

Another proof that *nou* 'inside' is incorporated comes from nominalization fact. For instance, from *nuo-suo* 'be sad', *the-nou-ke-suo*, 'sadness' is derived, and from *nou-mvü* 'be excited' *the-nou-ke-mvü* 'excitement' is derived. Here the incorporated construction is prefixed with a nominal prefix *the-* and a nominalizer *ke-* is infixed in between the noun and the verb.

Some other semantic unit which are expressed by incorporation are given below.

inside-? 'to pity' nou-meziē nou-mezie inside-? 'be angry' inside-restless 'be disturbed/ to worry' пои-теса inside-weak 'to feel down' nou-thachü inside-? 'be concerned' пои-пуй пои-гіій inside-easy 'be at peace' head-? 'feel giddy' tsü-melu tsü-chü head-pain 'headache'

va-chü

Instead of 'body' and 'mind', which according to Mithun (1994) are incorporated by most incorporating languages, Tenyidie incorporates *nou* 'inside' to describe different emotional experiences. Just as the incorporation of the noun *tie* is obligatory for some weather predicates, incorporation of body part *nuo* 'inside' is obligatory to express certain feelings and emotions. Apart from *nou* 'inside', other body parts are incorporated to describe experiences which are specific to the particular body part. Thus, we have constructions like *tsü-melu* (head ?) 'feel giddy', *va mha* (stomach cover)'have intestinal gas' *phi mesü* (leg kick) 'to stumble' etc.

Clark (1995:529) writes: "When describing physical and emotional feelings, the languages of the Mainland SouthAsian linguistic area commonly use a distinctive construction. This construction consists of a stative/adjectival verb which occurs in close association with a body-part term which in turn represents a part of an animate whole which is the subject of the stative verb." Most of the incorporating verbs described here – the ones that belong to the second type – are either stative or adjectival verb, and they describe the condition or state of the incorporated nominal, and the possessor of the body part is understood as undergoing that state.

## 5.7. Noun Incorporation and Denominal Verb Constructions

In denominal verb constructions, elements conveying the meaning of a verb and a noun join together, very much like the elements within NI constructions. The two phenomena look very similar as they share properties, and there are writers who equate denominal verb constructions with noun incorporation. For instance, Haugen (2008) says that in Hopi the formation of Denominal Verb Construction is akin to NI. Sadock (1980) calls the constructions which are formed by the verbal suffixes which obligatorily incorporate in West Greenlandic as NI constructions. There are others like Mithun (1986) who do not accept this position on the ground that such constructions differ in kind from NI.

The syntactic similarities between the two seem to say that there is a connection between them. Gerdts and Marlett (2008) say that noun incorporation may be an intermediate historical step between denominal verb constructions and standard clause structures,

suggesting that there is an intimate connection between the two. Mathieu (2013) also says that there are admittedly several differences between the two kinds of constructions, at the same time there are also many similarities, supporting the view that a common analysis is not out of reach.

As a phenomenon, denominal verb constructions exhibit some properties which are not seen in noun incorporation. One crucial difference between the two constructions is that the verbal elements in a denominal verb construction tend to convey conceptually basic meanings such as BECOME, HAVE, MAKE, ACQUIRE, USE, PUT ON, REMOVE, etc. The constructions are often used to express commonly occurring, everyday events, which, for the most part, do not acquire the status of fixed expressions, or show noncompositional meaning (Gerdts and Marlett 2008). Another feature which is seen across different denominal verb constructions is the inability of the denominal element to appear in isolation. It is necessarily bound, that is, it does not appear without being attached to a nominal root (Haugen 2008). Unlike the components in NI constructions, the nominal element is usually from a fairly open class, including borrowed words, and the constructions describe events which are often novel or culturally non-salient. The constructions do not usually stand for some fossilized forms as their formation is active in most cases (Gerdts and Marlett 2008).

In Tenyidie, the verb *chü* 'do/make' behaves like an incorporating verb on one hand, and a denominal element on the other<sup>33</sup>. Some of the different nominals with which it occurs are shown below:

thelhi chü 'to do business'

kedi chü 'to reign or be king'

terhü chü 'to fight war'

kedie chü 'to be in prison or serve as prisoners'

tsali chü 'to sing'

kruta chü 'to be a leader or to lead'

zhapu chü 'to preach' kecha chü 'to pray'

The above constructions have all the formal trappings of noun incorporation, that is, the nominal elements appear in their bare forms and are therefore number neutral, and as a result,

 $<sup>^{33}</sup>$  Gerdts and Marlett (2008) observed that if a language has only one denominal affix, it is usually HAVE or DO or MAKE or GET

they cannot serve as a discourse reference. The verb *chü* 'do/make' behaves like a verbalizing morpheme in other languages in that it is used productively in deriving new words – it freely occurs with loan words.

Like the constructions *madad karnaa* 'to help' and *intizaar karnaa* 'to await' in Hindi which 'act like single predicates' (Verma 1993), the constructions given above function as lexical equivalents of single verbs in languages like English. Like the verb *karnna* which freely occurs with loaned words – *love karnaa*, 'to love', *telephone karnaa* 'to telephone', or *criticize karnaa* 'to criticize' – *chii* 'do' also freely occurs with borrowed words<sup>34</sup>. Tenyidie has *telephone chii*, 'to telephone' *homework chii* 'to do homework', *criticize chii* 'to criticize' etc. *Karnna* in Hindi and *chii* in Tenyidie are like the verbalizing suffix in other languages in relation to non-native words<sup>35</sup> – in Ojibwe -*ke* freely occurs with borrowed words in deriving new verb forms (Mathieus 2013). However, *chii* differs from the usual verbalizing elements in that it can occur as an independent verb in certain contexts as shown in (62). This sets it apart from other verbalizing morphemes found in denominal verb constructions.

(62) Vizo lu ko chü shü vizo that PLU do put 'Vizo did those.'

While writing on incorporation in Inuktitut, Johns (2007) commented that the incorporating verbs in this language belong to a natural class of verbs – light verb – which does not contain the rich and complex semantic content which categorises full verb entries. One can say that the verb *chü* 'do/make' behaves like a light verb and not like the other incorporating verbs. Although the nominal element within the denominal verb constructions exhibits properties of incorporated nominals, the two constructions differ in the kind of situations and events they describe; one mostly describes institutionalized culture-specific activities, the other describes common daily activities. It is true that noun+verb sequences which are considered as NI constructions in the literature show up in different forms and express different meanings, still, it looks more appropriate to call the constructions with the verb *chü* 'do/make' as denominal verb constructions and not as NI constructions.

<sup>&</sup>lt;sup>34</sup> In Tenyidie, the borrowed words, regardless of its status in the original language are treated as nouns as in Hindi (Verma 1993).

Verma (1993), while describing *karnna*, commented that "it would, of course, be very comfortable to think of the verb as grammaticalizing device for the morphological derivation of a verb from a noun... the light verb *karnaa* 'to do' seems to be the grammaticalizing affix par excellence for such a derivation."

## 5.8. Noun Incorporation and Institutionalized Activities

As early as Sapir (1911), it has been noted that NI constructions refer to a unitary, institutionalized activity. Sapir describes this point in the following manner:

"It can only be suggested that what may be called typical or characteristic activities, that is, those in which activity and object are found regularly conjoined in experience (e.g. rabbit-killing, looking for a trail, setting a net), tend to be expressed by verbs with incorporated objects, whereas "accidental" or indifferent activities (e. g. seeing a house, finding a stone) are rendered by verbs with independent, syntactically determined nouns." (Sapir 1911:264)

Referring to those constructions which are formed by juxtaposing the verb and its object, Mithun (1984:856) also says: "the compound is more than a description; it is the name of an institutionalized activity or state." Mohanan (1995) says that while  $g^h$  aas kaatnaa 'grass-cutting' and kapde dhonaa 'cloth-washing' are possible,  $g^h$  aas dekhnaa 'grass-seeing' or kapde phaadnaa 'cloth-tearing' are not because, in most societies, activities such as grass-cutting and clothe-washing are seen as 'salient' or 'nameworthy' activities, but grass-seeing or cloth-tearing or not. He alludes to Hale and Keyser (1991) and calls the activities and events described by NI constructions as 'cultural encyclopaedia' of the languages users.

In Tenyidie, the constructions which I consider as NI constructions describe activities which are typical to the people in the region. For instance, the economy being predominantly agrarian, activities such as *chü whuo* 'meat-chase (to hunt)', *khuo te* 'fish-catch (to do fishing)' and *ga da* 'leaf-cut (to collecting wild vegetables/leaves)' are closely associated with the people in the region. Occasionally, people engage in these activities en masse. Others like *thenu lie* 'female-take (to marry)', *lie cie* 'field-cultivate (to do cultivation)', *thu pfe* 'cow-wait (to tend cow)', *si pfü* 'wood-carry (to carry firewood in a basket)', *leshü phrü* 'book-read (to study) etc., are also regular activities and they are not less "nameworthy".

### 5.9. Noun Incorporation and Idiomatic Expressions

Idioms generally involve verbs and their internal arguments, and it is said that the closer the relationship, the more idiomatic the expression becomes. In noun incorporation, the relationship between the constituents is not always straightforward. Very often, it is complex, or idiosyncratic, and the derived lexical compounds often take on meanings that are not completely equivalent to the sum of their parts. For example, srasre 'raise' + po 'hand' becomes 'surrender' in Kusaien, and taro-gi 'ask' + sotia 'soldier' becomes 'enlist' in Fijian (Mithun 1984).

This claim is corroborated by works like de Reuse 1994 and Dayal 2011. de Reuse observed that in Lakota, certain facts are expressed only through idioms which in turn is effectuated through incorporation. Some idioms cannot be taken in the non-idiomatic sense because incorporation is obligatory. For instance, in (63a) the subject  $waki_{i}ya$  'thunder being' is incorporated and the sentence has a non-compositional interpretation. (63b) is ungrammatical because there is an article and the nominal expression occurs as a full Noun Phrase. The examples clearly indicate that the incorporated construction has a sense which cannot be conveyed by non-incorporated construction.

Thunder.Being Art voice-AØ-carry P1

Referring to *laRkii dekhnaa* 'girl seeing' in Hindi, Dayal (2011:) says that the compound cannot be used to describe a situation in which one is sitting by the window watching people go by, some of whom happen to be girls. Rather, it refers to the act of looking at prospective bride with the purpose of arranging a marriage, and there is a certain amount of idiosyncrasy typically associated with lexical processes. She says that if not for this reason, there is no reason as to why *laRkii-dekhnaa* 'girl seeing' should be allowed but not *aurat-dekhnaa* 'woman seeing'; or *baccaa-khilaanaa* 'child-looking-after,' but not *laRkii-khilaanaa* 'girl-looking-after'.

(de Reuse 1994:242)

In Tenyidie, many of the NV compounds which I claim as NI constructions do not always give an entirely compositional meaning. In the examples below, (64a) and (65a) have a non-compositional meaning, but when a full noun phrase instead of a bare noun is used as in (64b) and (65b), the sentences lose their idiomatic sense. (64b) just means 'the person beat the water', and (65b) means 'the person read a book for many years'. The non-incorporation sentences occur in well-defined contexts, describing specific events.

- (64) a. Puo ndu dzü vü

  3SG yesterday water beat
  'He swam yesterday.'
  - b. Puo ndu dzü u vü3SG yesterday water DEF beat'He beat the water yesterday.'
- (65) a. Puo teicie kekra leshü phrü

  3SG year many book read

  'She studied for many.'
  - b. Puo teicie kekra leshü puo phrü3SG year many book one read'She read a book for many years.'

It is said that in Chamorro, the existential verbs gdi 'have' and tdi 'not have', obligatorily incorporate an NP (or small clause) complement (Massam (2001). In Tenyidie, when the corresponding verbs ni 'have' and  $j\ddot{u}$  'not have' incorporate the noun mha 'thing' as in (66) and (67), one gets non-compositional meanings 'be rich' and 'be poor' respectively. Similarly, incorporation of the noun mha 'thing' in (68) gives rise to the meaning 'be wise'.

- (66) Puo mha jü

  3SG thing not-have
  'He was poor.'
- (67) Puo mha ni
  3SG thing have
  'She is rich.'

(68) Kedi u solomon mha si se king DET solomon thing know very 'King Solomon was very wise.'

It can be said of Tenyidie that for expressions like 'be rich' or 'be poor' or 'be wise', incorporation is obligatory. There is no other way these senses can be properly indicated without incorporation.

## 5.10. Lexical or Syntactic?

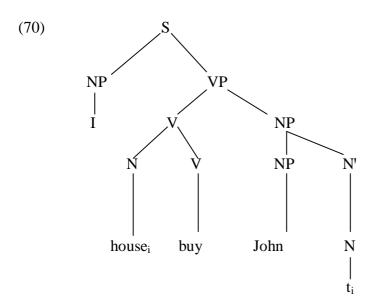
There are differences of opinion with regard to the processes involved in the formation of Noun Incorporation. While some consider it as a purely lexical phenomenon, others call it a syntactic process. Here I look at some of the theoretical frameworks to see which structure/framework Tenyidie best fits into.

Baker (1988) in his influential work on incorporation argued that noun incorporation is an instance of head movement. One of Baker's motivations is that in languages like Mohawk and Southern Tiwa, the incorporated noun can be modified by a word or phrase that 'remains morphologically outside the verb complex'. He says that sentences such as (69) are derived by the head movement as shown in (70).

(69) Wa-hi-nuhs-ahni:nu: john.

AOR-sS/3m-house-buy John

'I bought John's house.'



De Sciullo and William (1987:64) are of the view that noun incorporation is governed purely by the principles of morphology, and "the incorporated noun is added to the verb as an act of word formation". The compounding of verb and noun is done without reference to the syntactic environment and that the relation of a verb to its argument is done without reference to the internal structure of the verb. This, according to them, is possible because morphological processes which affect the syntactic distribution of the resulting word can operate on the features of words as well as on the argument structure of words.

Rosen (1989) classified NI Constructions into two types: the Compound Noun Incorporation and the Classifier Noun Incorporation. In the first type, the compounding is simple, that is, when a noun and a verb combine to form a complex verb, one argument of the simple verb is satisfied within the verb. Thus, if a simple verb takes two arguments, (x, y), the N+V complex become intransitive and takes only one: (x), an external argument.

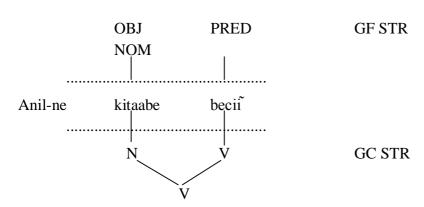
In the Classifier NI, the direct object argument and the incorporated noun are linked semantically in much the same way that a noun classifier is linked semantically to the noun it classifies. It is called as Classifier NI because the incorporated noun acts like a classifier on the noun it is associated with. The direct object argument is not satisfied within the complex verb, and, therefore, an object NP must co-occur with NI to satisfy the verb's argument structure. However, the incorporated noun places a selectional restriction on the verb, such that the object NP must be within the class of objects delineated by the incorporated noun root. The object noun phrase, if overt, must be more specific than (or,

in some languages, at least as specific as) the incorporated noun. Thus in Iroquoian, it is said that one can say *I animal-bought a dog*, but '*I dog-bought an animal*' is not possible.

Rosen further claimed that those languages that have Classifier NI also allow what is commonly called 'stranding', a process whereby an NP modifier is left without a head noun, when a noun with the same semantic reference is incorporated into the verb. She refers to the stranded items as 'null- head modifiers' because the head noun they modify is null.

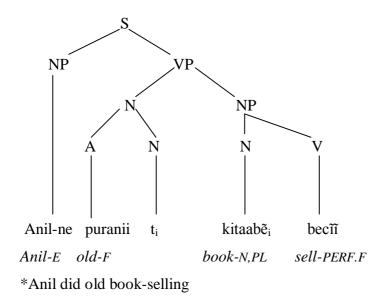
Noun Incorporation in Hindi, according to Mohanan (1995), requires a syntactic theory to recognize Grammatical Function (GF) representation and Grammatical Category (GC) representation as separate, though interacting, syntactic representation. This is because a noun and a verb together form a single lexical category with "the noun-stem exhibiting dual behaviour: it is a syntactic argument of a verb, but morphologically part of that verb." Mohanan (1995) further says that the distinction between GC-WORD and GF-WORD allows us to understand better the phenomenon of NI. As shown below, the N+V forms a single GC-WORD (V°). However, it is not a single GF-word: the N is an ARG, and the V is a PRED.

(71)



Even though he considers the operation as partly syntactic, he stops short of calling it a case of head movement on the ground that a tree structure proposed by Baker which is supposed to rightly represent the incorporated structure, fails to explain his data.

(72)



Dayal (2010) also makes a similar observation and I quote her:

"I wanted to point out that incorporation has a lexical and a syntactic component. It involves a lexical variant of a normal transitive verb so it is not surprising that it should show properties that are associated with lexical phenomena. At the same time, pseudo-incorporated nominals are distinct from compound nominals as well as from kind denoting terms." (Dayal 2010:43)

One of Dayal's reasons in calling incorporation constructions as lexical phenomena is the presence of idiosyncrasies and gaps in the possible [v N+V] construction. There is no syntactic explanation why *dekhnaa* 'see' occurs with *laRkii* 'girl' but not with *aurat* 'woman', or *baccaa* 'child' with *khilaanaa* 'look-after' but not with *maarnaa* 'beat':

In Tenyidie, NI constructions can be roughly grouped into three different types. In the first type, there are constructions such as *mhi-rho* 'to open eye', *dze-da* 'to clap', *phi-de* 'to stamp' etc, describing activities associated with the respective incorporated nominals. The verbal elements in these constructions do not occur as an independent verb elsewhere. One can say that they are like the dependent verb stems *dtatat* 'to rattle' and *e:k'il* 'to swing' in (73) and (74) in Washo (a language of Nevada) which rarely occur without a prefix (Mithun 1984:885).

(73) wag-dtatat 'to rattle' sound-to.rattle

(74) dul-e:k'il 'to swing one's arms around' = 'to cook' arm- to.swing

The nominal elements also undergo a tone change, that is, when they occur as an independent word in a non-incorporation construction, they occur in different tones. But in the incorporated constructions, they all have a low tone. Thus  $mh\tilde{\imath}$  'eye' becomes  $mh\tilde{\imath}$  in  $mh\tilde{\imath}$ -rho 'open eye',  $mh\tilde{\imath}$ -te 'wink',  $mh\tilde{\imath}$ -mia 'close eye', and  $mh\tilde{\imath}$ -pri 'close one eye';  $v\bar{o}$  'neck' changes to  $v\tilde{o}$  in  $v\tilde{o}$ -ri 'turn neck';  $ph\tilde{\imath}$  'leg' remains as  $ph\tilde{\imath}$  in  $ph\tilde{\imath}$ -de 'stamp';  $dz\tilde{e}$  'hand' remains as  $dz\tilde{e}$  in  $dz\tilde{e}$ -da 'clap',  $dz\tilde{e}$ -za, 'beckon';  $ts\tilde{u}$  'head' becomes ' $ts\tilde{u}$  in  $ts\tilde{u}$ -ngie 'node'. The incorporated nominals here behave like the noun stems in Ngandi, where the N stems appear in suppletive form when incorporated (Mithun 1984). Here, one can say that the process involved in the derivation of the constructions is purely lexical.

In the second type there are constructions like *thenu-lie* 'marry', *lie leshü-phrü*, 'study', *mha-cha* 'cook', *mha-cü* 'eat meal' etc. Here the incorporated nominals appear like any other object NP in an unincorporated counterpart. There is no visible fusion. These constructions can be analyzed using Mohanan's modal. On the one hand, the elements involved formed a morphologically 'complex verb'. As a grammatical category, they function together as a verb, but as a grammatical function, the incorporated nominal functions like the object of the incorporating verb.

De Sciullo and Williams (1988) says that 'words have argument structure' and the relation of a verb to its object is always one of  $\theta$ -role assignment, and compounds that receive a verbal interpretation involving  $\theta$ -role assignment by the right member to the left member form a subset of the general class of compounds. If one is to consider a particular construction as lexically derived base on these observations, one can say that the second type of NI constructions in Tenyidie are derived lexically since all the constructions have verbal interpretation and an assignment of  $\theta$ -role by the right member to the left member.

Another reason in favour of the lexicalist approach is the presence of the lexical gap. Like the lexical gaps in Hindi pointed out by Dayal (2011), Tenyidie has *thenu lie* 'female take (to marry)' but not \*thepfu lie 'male take', there is *khuo te*, 'fish catch', but not \*chü te 'meat catch', there is *chü whuo* 'meat chase (hunt animal)' but not '\*khunuo whuo 'animal chase'.

In the third type, the incorporated nominal is obligatorily preceded by a semireflexive as shown in (75). Constructions that come under this type partially look like the NI constructions in Mohawk where the possessor and modifiers are stranded due to incorporation<sup>36</sup>.

(75) John puo nou kemeyie ba te john 3SG-POSS inside suffer sit PRF 'John is worried.'

Prima facie, it appears like the subject moves up from the internal argument position leaving behind a copy of its *phi* features. If this assumption is correct, models discussed in works such as Halle and Marantz (1993), Chomsky (1995), would help in understanding the operations involved. The issue, however, needs a better understanding for a satisfactory explanation. Since this chapter is intended to show primarily the existence of NI constructions in Tenyidie, I leave this issue here for further research.

#### 5.11. Conclusion

In most of the incorporating languages, the structures of NI constructions are visibly different from the non-incorporated constructions. However in Tenyidie, they are formed just by juxtaposing a verb and its object together. The incorporated nominal loses its syntactic status as an argument in the process, and the NV unit functions as an intransitive predicate. The semantic effect is the same as in other compounding, that is, the components lose part of their individual salient properties in the process. The constructions denote unitary activities.

Properties such as the tendency of the non-specific nominal object to coalesce with the verb' (Massam 2001), the unambiguous nature of the nonspecific NPs in allowing only narrow scope reading (Enc 1991), the number neutrality of the bare nominals, the inability of the nonspecific nominal to provide discourse referent, the non-compositional meaning, and giving name to the institutionalized activities (Dayal 2011, Farkas and de Swart 2003), are seen in the constructions I claimed as NI constructions.

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<sup>&</sup>lt;sup>36</sup> Baker (1988) says that "the incorporated noun can be modified by a word or phrase that remains morphologically outside the verb complex."

From the most tightly knit construction such as *mhi-te* 'to wink', and *dze-da* 'to clap' to the loosely knit constructions like *leshü phrü* 'book read (to study)', it is shown that all the incorporated nominals are nonspecific. They are never marked for case, number or gender, or accompanied by any other markers like the definiteness markers. The relationship between the constituents involved is always one of theta role assignment as noted in De Sciullo and Williams (1988), and the constructions always have a verbal interpretation. As in Lakota – which is also true with the large majority of languages with NI – the constructions describe 'habitual, permanent, specialized, characteristic, or unintentional activities or states, or non-localized events, which are seen as a unified concept (de Reuse 1994).

In the beginning, I mentioned that noun incorporation in Hindi and Tenyidie behave alike in many ways. However, incorporation in Hindi exhibits some features which are not seen in Tenyidie. They are: the incorporating verb agrees with the incorporated nominals in some cases; the incorporated nominal does not have to occur next to the verb, and it can also be a phrasal category. Due to reasons like these, Dayal (2011) calls incorporation in Hindi as a pseudo-incorporation. In Tenyidie, the nominal element involved is never a phrasal category, and the nominal element and the incorporating verb do not show any agreement. As such incorporation in Tenyidie cannot be called pseudo-incorporation.

# Chapter 6

### Conclusion

Certain aspects of human experience are common to all people, and according to Bach (1981:79), "it is this matrix of common experience that is the stuff of which grammars are made." However, since the relation between the signifier and the signified is arbitrary – because of the arbitrary nature of the "linguistic sign" (Saussure 1915) – languages differ in the way different situations and experiences are represented. Also, "events, as opposed to physical objects, are not individuated in the world, and what in the complex flow of happenings in the world can be considered an event is a matter of construal, reflected in the properties lexicalized in verbs" (Levin and Rappaport Havov 1999). Therefore it is no surprise that linguistic representation of the common experiences varies from language to language.

The study of a predicate or a complex predicate formation deals with how the different events and situations are encoded in the grammar. As such, a wide variety of constructions, with many kinds of semantic structures come within its scope.

As shown in the beginning, several people have looked at how complex predicates are formed, using different analytical techniques. In the light of the different insights and conclusions drawn from those works, I show that the different types of constructions described in the previous chapters – compound verb constructions, causative constructions, serial verb construction, and noun incorporation – qualify as complex predicates. Monoclausality is considered as one of the quintessential features of complex predicates, and I have shown that the different kinds of constructions behave as a single clause with the exception of the permissive constructions. In this chapter, I show that the constructions exhibit other characteristics of complex predicates found in the literature.

# 6.1. Compound Verbs Constructions as Complex Predicates

As noted before, in a complex predicate, two or more predicating element contribute part of the information ordinarily associated with a head (Alsina el at. 1997). For instance, in the Aspectual Complex Predicate in Hindi such as (1), both the verbs contribute lexically encoded information to the semantics of the construction. While the first verb acts as the main predicational element, the second verb modulates the primary event, and they together function as a single syntactic predicate (Butt 2005).

(1) vo ro par-aa

Pro=Nom weep fall-Perf.N.sg

'He fell to weeping (burst into tears).'

In a coverb construction, two different kinds of verbal words – a coverb and an inflected finite verb – jointly form a predicate. The coverb generally conveys the main lexical meaning in the predicate structure, and the finite verb which usually functions as a light verb conveys information related to tense, aspect, mood and agreement, and some very general predicate information (Baker and Harvey 2010). Coverb constructions and aspectual complex predicates are treated as complex predicates because the information from the different constituents merges to describe a single conceptual structure.

Compound verb constructions in Tenyidie described in the second chapter have all the trappings of complex predicates. This is shown in (2) - (4) below. The sentences represent the three different types of compound verb constructions in Tenyidie. The predicates in the sentences have two verbal elements which occur with a lexically encoded meaning. The different constituents behave exactly like the components within the compound verb constructions in Hindi; V1 contributes the main semantic content, and V2, provides the aspectual and other general predicate information.

- (2) Puo pfe puo do shü
  3SG shawl one weave put
  'She weaved a shawl (for someone).'
- (3) Niepu ko pu par ta zhie

  3SG PLU bloom come PRF PROG

  'The flowers have started to bloom.'
- (4) Pera kekra pro tuo bird many fly walk/leave 'Many birds were flying.'

In (2), the verb do 'weave' is the main predicational element. The second verb  $sh\ddot{u}$  is responsible for the accomplishment reading. Like some V2s in Hindi which signal completion (Singh 1990), it indicates that the activity is bounded and the sentence describes a telic event. In a more pertinent sense, it indicates that the action is performed for the benefit of someone other than the weaver.

The verb *par* 'come out' in (3) profiles the inception of the event denoted by the first verb, and the combined form describes a single unified concept. In other contexts, *par* 'come out' takes a locational complement. However in its capacity as a light verb, it does not subcategorise for a complement independently but modifies the main verb by adding a sense of inchoation to it. The verbs here predicate like a single element, that is, "their arguments map onto a monoclausal syntactic structure" (Butt 2010:49).

In (4), the verb sequence *pro tuo* 'fly walk' describes a single unified event. The main event is encoded by the first verb, and the second verb modifies the event by indicating that it is ongoing. Here there is a notion that the birds are flying from one place to another, for a relatively longer duration or over a longer distance – like the flight of the migratory birds – as opposed to flying at a particular location. If *tuo* 'walk' is replaced by another posture verb like *ba* 'sit' or *tha* 'stand', the construction will have another slightly different meaning. As a modifying verb, it adds a sense related to the lexical meaning of the verb *tuo* 'walk/leave', that is, the sense of moving from one place to another, to the whole cluster.

The light verbs in the examples above are not semantically vacuous. The fact that a replacement of any of these verbs by another similar verb can alter the semantics of the constructions indicates that they are more than mere aspectual markers. The verbs in sequence allow adverbial modifiers to come in between them, but that does not prevent us from calling them as a single functional unit (Ackerman and Webelhuth (1998)). Whether they are formed in the syntax as Butt (1997) surmises, or in the morphology as claimed by Ackerman and Webelhuth (1998), base on the reasons given here, one can say that they qualify as complex predicate construction.

### 6.2. Causative Constructions as Complex Predicates

Chapter 3 describes the different causative constructions in Tenyidie. Among the five different types of constructions that express causation, I have shown that the permissives are biclausal constructions; therefore they do not qualify as complex predicates. Here I show that the transitive member of the transitive-unaccusative alternation, the causative member of the causative alternation, and the resultative constructions exhibits properties of complex predicates. Since the non-segmentable lexical causatives do not have complex structure, they are not included here. The examples represent the three different kinds of causative expressions.

- (5) Bio khrüva u vü phro shü bio glass DET hit break put 'Vozo broke the glass by hitting it.'
- (6) Vozo mepfhinuobuo u pe tu shü vozo candle DET CAU burn put 'Bio lighted the candle.'
- (7) Senuo mizhü u sü ke mesa shü senuo table DET wipe CAU clean put 'Senuo wiped the table clean.'

Ackerman and Webelhuth (1998) observed that predicates with the same or similar contentive aspects can be expressed as single morphological words or as combinations of several words, depending on the preferences of individual languages. The predicate shown in (5), and its English counterpart is a case in point here. The English verb 'break' does not lexicalize or profile the causing sub-event, but its translational equivalent *vü phro* 'hit break' in Tenyidie profiles the causing as well as the resulting state within a semantic frame. In other words, the causing sub-event which is left unspecified in English as background information is overtly represented in Tenyidie, and the two components representing the two sub-events function together as a unit.

The composition of the transitive verb form here fit neatly into the template Rappaport Havov and Levin (1998) provide for the result verbs. The template is shown in (8).

(8) [[xACT] CAUSE [BECOME[y<STATE>]]]

If a verb such as *vü phro* 'break' is put in a template, it will appear as in (9), and the causative sentence like (6) will appear as in (10).

(9) [[xACT<v $\ddot{u}$  'beat'>y] CAUSE [BECOME[y<p $^h$ r $\grave{o}$  'break'>]]]

#### (10) [[vozoACT<v $\ddot{u}$ >khr $\ddot{u}$ va u] CAUSE [BECOME [khr $\ddot{u}$ va u <p $^h$ r $\dot{o}$ >]]]

Here, the first verb slot which describes the causing sub-event is always occupied by a transitive verb. The second verb, which is always in a dependency relationship with the first verb, denotes the resulting state. The two components do not allow any element to intervene between them. There is a tight semantic bond between them, and they can be treated as a single syntactically integrated predicate. They behave like monomorphemic predicates in other languages. Goldberg (2003) calls this kind of constructions as "inseparable complex predicates".

Alsina (1997:204) says that "the a-structure is the predicate information provided by the lexicon that is relevant for determining the syntactic function that this predicate takes (its syntactic subcategorization)", and a complex predicate, or a complex argument structure, emerges when that relevant information comes from different verbal elements. In (5) the information required for the determination of syntactic argument comes from both the verbs.  $v\ddot{u}$  'hit' requires a tangible substance and  $p^h ro$  'break' requires a breakable substance as its object. Thus  $khr\ddot{u}va$  'glass' a tangible and a breakable substance is selected as the object of the construction  $v\ddot{u}$   $p^h ro$  'hit-break'. The sentence would be ungrammatical if a non-tangible or an unbreakable object is chosen. This indicates that both the verbs participate in the selection of the grammatical function.

When the verb *tu* 'burn' occurs in isolation, it describes an intransitive situation. In (6), it is causativized by the morpheme *pe*, and the predicate subcategorises for an agent and a theme argument. The causative morpheme is instrumental in introducing the subject argument *Bio* here. The causative morpheme *pe* does not occur as an independent verb, but when it combines with a lexical verb, it affects the argument structure of the verb. Here also, one can say that the information necessary for determining the syntactic arguments comes from the two different elements; the causative morpheme and the main verb. Butt (2005) calls this type of constructions as morphological complex predicates.

Resultative construction shown in (7) represents another type of causative constructions. Resultatives in Tenyidie are composed of three identifiable verbal elements;

the first element is always a transitive verb, the second element is a causative morpheme, and the third element is generally an intransitive verb or an adjectival verb. Much like the components 'wipe clean' and 'made clear' in 'John wiped clean the table' and 'John made clear that he wouldn't help', where a V is appended with a P or an A (Williams 1997), the first element which profiles the causing events is appended with the second and third elements which together denote the resulting state. The constituents behave like a single predicating unit for all the syntactic processes. For instance, they function like a simple transitive verb in case assignment – compare (11) and (12). They also resist separation by other particle or element as shown in (13).

- (11) A n khrohi shü tuo

  1SG you help put FUT

  'I will help you.'
- (12) A n khrü ke mesa shü tuo

  1SG you wash CAU clean put FUT

  'I will wash you clean.'
- (13) \*A n khrü mha ke mesa shü tuo 1SG you wash quickly CAU clean put FUT

All the three different kinds of causative expressions shown above contain more than one element, and each element contributes information needed to determine the syntactic structure of a clause. Therefore they qualify as complex predicates

# 6.3. Serial Verbs Constructions as Complex Predicates

There are writers like Butt (1993) who do not consider serial verbs as complex predicates. However, the term complex predicate is used here as a cover term for those constructions that have a complex structure and are monoclausal, and since serial verb constructions also show properties of monoclausal constructions, they are treated as complex predicates. As shown in Chapter 4, serial verbs show up in different forms and encode different kinds of events. Here I show that the different kinds of serial verbs display properties of complex predicates.

Examples (14) and (15) represent the directional verb serial verb constructions.

- (14) Vozo mhachaki nu ta le te vozo kitchen inside run go PRF 'Vozo went to the kitchen running.'
- (15) vozo mhachaki nu kra le te vozo kitchen inside cry go PRF 'Vozo went to the kitchen crying.'

In both the examples, the verbs in series retain their primary lexical meanings. Both the sentences have properties that can be lexicalized by two distinct predicates and thus could potentially be conceptualized as involving two events. However, the different events have the same location and are temporally dependent. In both the examples, the event denoted by the first verb begins when the progress towards the result begins, and which necessarily extends until the result is achieved. In both the sentences, the verbs in sequence belong to a single clause and each verb contributes information needed for the selection of arguments. Thus, they qualify as complex predicates.

In instrumental serial verb constructions like (16), the serialized verb *pie* 'hold' does not really imply the holding of the instrument by the agent, but a slightly different sense, a sense much closer to *se* 'use' is implied. Similarly, in comitative serial verb constructions like (17) *ze* 'take/receive' has a sense similar to 'with' in English. In both the sentences, there is only one predicate with different verbs expressing the different aspects of the same situation. In both the sentences, the first verb behaves partly like a case marker, and contributes a distinct meaning seen only in serial verb constructions. Since the verbs in the sequence are equally active in introducing different grammatical roles, the constructions can rightly be called as complex predicates.

- (16) Puo kotari pie nhasi u phro shü

  3SG knife hold fruit DET cut put

  'She cut the fruit with a knife.'
- (17) A puo ze vor

  1 SG 3 SG receive come

  'I brought him/I came with him.'

In causative serial verbs such as *khe-sia* 'be without food-die (to die of hunger)', *kre-meze* 'drink-be drunk (drink and get drunk)', the sub-events do not completely coincide, but the first event is sufficient to lead to the second event. These sequences describe complex events which are commonly regarded as associated experience, and they are also conceived as a single unitary event (Aikhenvald 2006).

Goldberg (2010:51) says that "the sub-events within a semantic frame need not be casually related," but they (sub-events) must "designate a coherent, familiar situation or experience that constitutes a cultural unit." In the following examples, the verbs in series describe series of events which are not causally related, yet are seen as a coherent and familiar experience. The examples represent the multi-event serial verbs.

- (18) Khunuo huo khunuo kekri te cü ya animal some animal other catch eat HAB 'Some animals catch-eat other animal.'
- (19) Uko lhako khrü cü ya
  3PL rice buy eat HAB
  'They buy-eat rice.'

(18) can be said of animals which feed on other live animals. Here, te 'catch' and  $c\ddot{u}$  'eat' describe two different activities, but as serial verbs, they function as a single predicate and the acts of catching and eating are seen as a unified event. The verbs jointly determine the argument structure in that the construction obligatorily selects carnivorous creatures as its subject and living creatures as its object. In (19),  $khr\ddot{u}$  'buy' and  $c\ddot{u}$  'eat' act as a single predicate in the selection of complement. If not, the sentence would be ungrammatical because Tenyidie has two different words for rice -khutie 'cooked rice' and lhako '(uncooked) rice' -khutie 'cooked rice' as its complement.

In most cases, dative sentences in Tenyidie contain a number of predicative elements as in (20). Even though there are three different verbs in the sentence, they describe related or associated events which are experienced together and which can be conceived as a unitary event. The fact that the situation can be encoded by a single lexical verb in English lends support to the claim. Similarly, in the resultative serial verbs shown in (21), the situation encoded by the verbs in series is a coherent and a familiar experience which also can be

viewed as a single complex event. The object of the verb  $v\ddot{u}$  'beat' which is also the agent of the verb kra 'cry' or pe-kra 'CAUS-cry' has an accusative case. If the verb kra 'cry' were to assign case on its own, its argument would have a nominative case since it is an intransitive verb. The fact that the second person singular pronoun has an unaccusative case indicates that the case assignment is done by the different elements together. In both the examples, the different verbal elements behave as a single predicating unit.

- (20) Nyabou chenü khrü pie a tsü nyabou sweets buy hold 1SG give 'Nyabou bought me sweets.'
- (21) Supuo n vü pe-kra shü ga who 2SG.ACC beat CAUS-cry put QP 'Who beat you and made you cry?'

There are writers who call serial verbs as single-headed constructions (Dechaine 1993). There are others who analyze them as phrasal co-heads that contribute their combined information to a functional structure associated with a single clause nucleus (Ackerman and Webelhuth 1998). Whichever way one analyzes them, the different kinds of serial verb constructions in Tenyidie are single-clause constructions and they display properties which are characteristic of complex predicates.

# 6.4. Noun Incorporation as Complex Predicate

According to Mohanan (1997:432), complex predicates are formed when "two semantically predicative elements jointly determine the structure of a single syntactic clause." He says that elements such as nouns adjectives and nonfinite forms combine with another verb and form a single syntactic predicate, and in the construction such as (22) where the noun is the host, the number, meaning, and case of the arguments are jointly determined by the noun and the verb.

(22) raam-ne mohan-par bharosaa kiyaa
Ram-E Mohan-L reliance/trust-N do-PF
Ram trusted/relied on Mohan.

Mohanan (1997) further says that the structures of the complex predicates are not identical across languages. One parameter of variation among the N+V Complex predicates is the argumenthood of the nominal host; one in which the host is a syntactic argument and another in which it is part of the predicate without any argument status. Another parameter of variation is the category structure of the host. In Hindi, it is a lexical category, but in languages like Malayalam, the host is a phrasal category. Referring to (22), he says that the predicate is formed from two distinct words, that is, the noun  $b^harosaa$  'trust' and the verb kar 'do' form a single categorical word. The third argument Mohan – which is not licensed by the dyadic verb kar 'do' – is plausibly licensed by the noun  $b^harossa$  'trust' which indicates that the noun  $b^harosaa$  takes part in the determination of argument structure in the clause and, therefore, participates in the predicatehood.

In all the NI constructions described in Chapter 5, the nominal element involved behaves as a predicational element, and the construction receives a verbal interpretation. The noun and the verb exhibit a more than usual closeness. The bond between the elements differs from one construction to another. However, the nominal element is always seen as part of the predicate and for all the syntactic operations, they behave as a single predicating unit. For instance, the nominal element cannot be extracted using WH-question. Another clear indication that the N+V constructions form syntactic atom is that they can undergo category changing process such as nominalizations — nominalization is a lexical process, and the lexicon cannot take syntactic structures as input for its operation (Alsina 1997). These claims are seen in the examples (23) - (27) which represent the different kinds of NI constructions in Tenyidie.

- (23) Puo mhì rho mo te 3SG eye open? NEG PRF 'She did not open her eyes.
- (24) Puo mha cü ba

  3SG thing eat sit

  'He was eating (a meal).
- viu meeting in language tell put 'Viu spoke/preached in the meeting.'

- (26) Thie tei rü lho
  today sky/weather rain NEG-FUT
  'It will not rain today.'
- (27) Puo puo nou kemezhie ba te 3SG 3SG inside suffer sit PRF 'She is worried.'

In (23), both the constituents – *mhì* 'eye' and *rho* which corresponds to 'open' – occur as bound morphemes. As a predicating unit or as a syntactic atom, they cannot be separated by any other element. When *mhì* 'eye' occurs as an independent word, it always has a double low tone, but in constructions like *mhì-rho* 'open eye' it always has a low tone and appears as a dependent element. The bound form appears in other verbs such as *mhì-te* 'wink' *mhì-mia* 'to close eye' and *mhì-pe* 'squint'. The second constituent *rho*, *te*, *mia* and *pe* in these verbs neither occur as independent verb nor as dependent element elsewhere with the same meaning. As a morphological unit, *mhì-rho* 'open eye' is opaque to syntactic rules.

In (24), the noun mha 'thing' does not have any specific reference. Ostensibly, it appears as the syntactic object of the verb  $c\ddot{u}$  'eat'. However, as Giridhar (1991) observed, it occurs as a component of a verb and not as its syntactic object and therefore it cannot be questioned by a WH Questions such as 'What is he/she eating?' Or 'What did he eat?' It only delimits the activity of eating to the eating of meals.

The noun *die* 'language' and the verb pu 'tell' in (25) show similar closeness. The construction gives a meaning which is not entirely compositional. It describes a generalized event, that is, an act of giving a speech. The construction nominalises like other non-derived verbs. Thus  $die\ p\ddot{u}$  'speak' becomes  $die\ p\dot{u}$  'speech' when the tone of the final syllable is changed. The verb pu 'tell' is a ditransitive verb and when it occurs in a simple predicate, it freely occurs with a dative phrase as shown in (28). But when die 'language' is incorporated, the construction functions like an intransitive verb. The presence of the nominal element alters the selectional property of the argument structure, and the construction does not freely occur with dative complement as shown in (29).

(28) A n ki pu shü tuo

1SG 2SG DAT tell put FUT

'I will tell you.'

(29) \*A n ki die pu shü tuo

1SG 2SG DAT language tell put FUT

'I will preach /speak to you.'

Example (26) represents another type of incorporation; incorporation of the subject by weather verbs. When the verb  $r\dot{u}$  'rain' is uttered for the first time in a discourse, it is never uttered alone. It always occurs with  $te\ddot{t}$  'heaven/weather' as in (26) above. The noun and the verb in this construction act as a single morphological unit and they resist separation by any other element. The nominal element cannot be treated as a syntactic argument as it cannot be questioned independently of the verb  $r\dot{u}$  'rain'. The verb  $te\ddot{t}$  r $\dot{u}$  'rain' becomes a noun when the extra high tone of the first syllable is changed to low tone as in  $te\dot{t}$  r $\dot{u}$  'rain'. It is not possible to nominalise the verbal element  $r\dot{u}$  'rain' without the nominal element.

Example (27) represents incorporation of body parts. Here one can say that the subject argument is jointly determined by the noun and the verb because, when *kemezhie* 'suffer' occurs alone in a sentence, it selects + animate subject. When it incorporates the nominal element *nou* 'inside', the subcategorization frame of the predicate changes, that is, the predicate *nou kemezhie* 'worry' subcategorises for a + human subject. Here the nominal element modifies the argument structure by imposing a selectional restriction.

According to Alsina (1997), Predicates, or PRED values are subject to composition and not unification. And a predicate composes with another predicate when its argument-taking abilities need to be completed by another predicate. Two predicates compose when they are in a structure of sisterhood relation and one of them is an incomplete predicate. In the examples shown above, the verbal elements can be said to be incomplete in the sense that some of them do not occur in isolation, and some of them when combined with a nominal element get their subcategorization frame modified, and the components are always in a sisterhood relation. In all these, one sees properties found in the complex predicates of other languages.

## 6.5. Summery

Complex predicates have been the subject of inquiry for quite sometimes. Many writers have looked at it using different approaches, but there seems to be a particular line of thought

which has not received enough attention; the notion that predicate formation is in some sense related to how a particular society looks at its surrounding, or how different events and situations are viewed in a particular culture. Several writers have pointed out the relevance of the cultural aspect in the study of predicate formation. For instance, Enfield (2002) says that event typicality is a cultural phenomenon, which is accounted for and described in terms of cultural representations. He also says that for a complex event to become typical, it has to have a currency, that is, exists as a cultural representation, and readily available to speakers. According to Petruck, (1996) a word within a *Frame Semantics* represents a category of experience, and the meaning of a word is defined and understood base on the surrounding culture. Writing on the verb serialization in Ewe languages, Westermann (1930:126) says something similar and I quote him.

"Ewe people describe every detail of an action or happening from beginning to end, and each detail has to be expressed by a special verb: they dissect every happening and present it in its several parts, whereas in English we seize upon the leading event and express it by a verb, while subordinate events are either not considered or are rendered by means of a preposition, adverb, conjunction, or a prefix on the verb."

Grimshaw (2005:85) asks "how complicated can a verb meaning be?", and in response, she seemed to say that the constraints cannot be actually specified, or what is lexicalized in a root is unpredictable, and I quote her:

"On the one hand, it seems that the answer is: as complicated as you want. For example, suppose there is a manufacturing process that involves pulverizing something, then mixing it with molten plastic, allowing it to harden and then encasing it in steel. Of course, we can label the entire process with one verb: *to smolt*, for example."

The observations given above seem to say that for the comprehensive understanding, complex predicates are to be viewed partly as a cultural construct. The idea seems viable since what is perceived as an event often differs from culture to culture and many of the constructions find their natural explanation when they are viewed as cultural expression. This, however, is not to deny the importance of the other approaches in understanding the phenomenon. If we look at how different events are encoded in different languages in the light of the observations given above, Bach's (1986:15) observation seems to sum up well what the different authors are trying to say, and I quote him: "the principles of individuation

which are crucial for expressions and concepts in the verbal domains are more an artefact of our language or conceptualizations of the world than something about the world itself."

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