

THE UNIVERSITY OF CALGARY

Aspect and the Chipewyan Verb

by

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## ABSTRACT

In the existing Athabaskan literature, the morphological and semantic properties of the imperfective and perfective prefixes, as well as their distribution across the verb corpus, are not considered in any detail. The goal of this thesis is to gain a better understanding of the morphosemantic distribution of the five pairs of imperfective and perfective aspect prefixes in Chipewyan. To this end, Smith's five universal situation types are applied to the restricted distribution of the aspect prefix pairs which, in turn, creates a classification of the morphosemantic properties of Chipewyan verbs. Although previous Athabaskan analyses contribute to the present research, they do not consider the properties of the Athabaskan languages from a crosslinguistic perspective. In contrast, the present analysis sheds light on the importance of a universal perspective of Chipewyan and provides a better understanding of the significance of the imperfective and perfective aspect prefixes in the Chipewyan verb.

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## DEDICATION

*To the people of La Loche, Saskatchewan*

### *History of La Loche*

- 1776 Peter Pond crossed Methy Portage
- 1850 Francis Mongrand built the first house in La Loche
- 1877 First church built
- 1880 Hudson's Bay store built in west La Loche
- 1895 First priest, Father Berrard, comes to La Loche
- 1920 Cat train - used to haul freight
- 1923 Batisse Fontaine bought first outboard motor - Evinrude
- 1929 First plane landed in La Loche - pilot, Mencil
- 1936 Post office established - Hudson's bay built in La Loche
- 1941 White school built by Aimie Janvier and Little John Mongrand
- 1942 First teacher - Alex Sapowski
- 1944 First Grey Nun arrived - hospital built in October
- 1945 DNR came to La Loche
- 1946 Brother Vouchan arrived - School board documents recorded  
Members - Norbert Maurice, William Janvier, Raphael Janvier, John  
Blackhall, and Father Ducharme
- 1947 Sawmill built
- 1950 Father Mathieu arrived - C and M airways founded
- 1952 First pool hall built by Robbie Fontaine
- 1958 Coop opened - First power plant built
- 1959 Trainer Jet CF 104 crashes into Lac La Loche in January  
Student pilot named "Moose" was killed
- 1961 Laurent Lemaigre and Arsene Fontaine purchased first skidoos
- 1968 RCMP depot opens - Bill Harrison and Big John first officers
- 1972 The Bull Whip Restaurant opens operated by Ray and Bruce Ruelling -  
Burned down in 1974
- 1974 Hydro electric power comes to La Loche
- 1976 Television comes to La Loche September 2, 1976 -  
First program viewed - Get Smart
- 1978 Spring of 1978 arena opens - Robbie Fontaine Memorial Centre
- 1979 Construction of La Loche High School completed

HISTORY - Researched by Jim Perry's Class A Students  
Dene High School Year Book. 1979-80. Josten's / National School Services Ltd.  
Winnipeg, Manitoba, Canada.

# TABLE OF CONTENTS

Approval Page.....	ii
Abstract.....	iii
Acknowledgments.....	iv
Dedication.....	vi
Table of Contents.....	vii
List of Tables.....	x
List of Figures.....	xi
List of Abbreviations.....	xii
 INTRODUCTION.....	 1
 CHAPTER 1: ASPECTS OF CHIPEWYAN GRAMMAR.....	 7
1.1 PHONOLOGY.....	7
1.1.1 The Phonemic Inventory and Orthography.....	7
1.1.2 Tone.....	9
1.1.3 Syllable Structure.....	9
1.2 MORPHOSYNTACTIC CATEGORIES.....	11
1.2.1 Nouns.....	11
1.2.2 Postpositions.....	13
1.2.3 Verbs.....	14
1.3 CONCLUSION.....	15
 CHAPTER 2: THE PHONOLOGICAL AND MORPHOLOGICAL STRUCTURE OF THE VERB .....	 16
2.1 MORPHOPHONOLOGY.....	16
2.1.1 Conjunct and Disjunct Prefixes.....	17
2.1.2 Epenthesis.....	18
2.1.3 Metathesis, Tensing, and Nasalization.....	19
2.1.4 Vowel Deletion.....	21
2.2 VERBAL PREFIXES.....	23
2.2.1 The Classifier.....	24
2.2.2 Pronominal Prefixes.....	28
2.2.3 Primary Aspect and Mode Prefixes.....	30
2.2.4 Secondary Aspect Prefixes.....	31
2.2.5 Direct Object Prefixes.....	34
2.2.6 Adverbial and Incorporated Elements.....	35
2.3 THE VERB AND LEVELS OF REPRESENTATION.....	38
2.4 CONCLUSION.....	42
 CHAPTER 3: CHIPEWYAN ASPECT PREFIXES.....	 43
3.1 ASPECT AND MODE.....	44
3.1.1 Aspect.....	44
3.1.2 Mode.....	45
3.1.3 Aspect and Mode Compared.....	46
3.2 ASPECT IN CHIPEWYAN.....	47
3.3 THE ASPECT PREFIXES IN CHIPEWYAN.....	48

3.3.1	Imperfective Aspect.....	49
3.3.1.1	Ø- imperfective.....	49
3.3.1.2	ne- imperfective.....	51
3.3.1.3	the- imperfective.....	53
3.3.2	Perfective Aspect.....	55
3.3.2.1	ghe- perfective.....	55
3.3.2.2	the- perfective.....	57
3.3.2.3	ne- perfective.....	59
3.3.3	Section Summary.....	61
3.4	MODE IN CHIPEWYAN.....	61
3.5	THE MORPHOSEMANTIC DISTRIBUTION.....	63
3.6	SUMMARY.....	66
CHAPTER 4: ATHABASKAN VERB CLASSIFICATIONS.....		68
4.1	PREVIOUS ATHABASKAN VERB CLASSIFICATIONS.....	69
4.1.1	Li (1946).....	69
4.1.1.1	The Model.....	69
4.1.1.2	The Modes.....	70
4.1.1.3	Discussion.....	72
4.1.2	Kari (1979).....	73
4.1.2.1	The Model.....	73
4.1.2.2	Verb Theme Categories.....	75
4.1.2.3	Discussion.....	77
4.1.3	Rice (1989).....	79
4.1.3.1	The Model.....	79
4.1.3.2	Verb Theme Categories.....	81
4.1.3.3	Discussion.....	83
4.1.3	Summary of Traditional Classifications of Athabaskan Verbs..	83
4.2	SMITH (1991).....	84
4.2.1	Viewpoint Aspect.....	85
4.2.2	Situation Aspect.....	87
4.2.3	Binary Distinctions.....	89
4.3.2.1	[+/- stative].....	89
4.3.2.2	[+/- durative].....	90
4.3.2.3	[+/- telic].....	90
4.2.4	Smith's Five Situation Types.....	91
4.2.4.1	State vs. Active Situation Types.....	92
4.2.4.2	Activities and Accomplishments.....	94
4.2.4.3	Achievements, Accomplishments, and Activities.....	98
4.2.4.4	Semelfactives.....	100
4.3	SUMMARY.....	102
CHAPTER 5: SITUATION TYPES AND CONJUGATION.....		103
PATTERNS IN CHIPEWYAN		
5.1	CHIPEWYAN GRAMMATICAL TESTS.....	104
5.2	ACTIVE SITUATIONS.....	108
5.2.1	The Ø-γ Verb Class.....	108
5.2.2	The n-n Verb Class.....	113
5.2.3	The Ø-θ Verb Class.....	118
5.2.4	The Ø-γ and Ø-θ Verb Class.....	123

5.3	STATIVE SITUATIONS.....	128
5.3.1	The N/A Verb Class.....	128
5.3.2	The $\theta$ - $\gamma$ Verb Class.....	130
5.4	SUMMARY.....	133
CHAPTER 6: CONCLUSION.....		136
6.1	A REVIEW.....	136
6.2	FINAL REMARKS.....	138
BIBLIOGRAPHY.....		142

## **LIST OF TABLES**

Table 1:	Consonantal Inventory	7
Table 2:	Vocalic Inventory	8
Table 3:	Chipewyan Grammatical Tests	107

## LIST OF FIGURES

Figure 1:	The Na-Dene Language Phylum	3
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## LIST OF ABBREVIATIONS

1s	first person singular
2s	second person singular
3s	third person singular
1d	first person dual
2d	second person dual
3d	third person dual
adv	Adverbial prefix
cl	classifier
CM	conjugation marker
DO	direct object
dp	duoplural
fut	future
H	high tone
IDO	indirect object
imp	imperfective
L	low tone
NI	incorporated noun
O	object
opt.	optative
P	postposition
perf	perfective
S	subject
sg	singular
the	thematic prefix



## INTRODUCTION

The linguistic category of aspect has occupied the literature on Athabaskan languages for a considerable time. In the earliest endeavors the task was simply to identify and organize morphosemantic categories within the verbal system. A gradual understanding of the Athabaskan languages stems from these early studies which were largely accomplished by Sapir (1911, 1915), Li (1946), and Hoijer (1949) among others. These categories were further specified by Leer (1979) and, more significantly, by Kari (1989) who initiates a more complete perspective on the verbal categories comprised in the Athabaskan languages, particularly Ahma.

A majority of Athabaskanists are in agreement regarding the major morphological categories of the verb. Their views on the aspect category are provided in the words of Midgette (1996:305) as follows:

Verbs are structured by two major interacting systems, which linguistic typologists would identify as lexical aspect (or *aktionsart*), defining the temporal shape of the verbal action, and inflectional aspect, the productive verb elements which adjust the given temporal shape.

Lexical aspect categories are defined as *aspects* in the Athabaskan literature which are labels for meaning types and are often represented by a prefix and a distinctive stem.

Aspects vary among the Athabaskan languages where some of the more common labels include *momentaneous*, *continuative*, and *repetitive*. These Athabaskan *aspects* are part of the derivational formation of the Athabaskan verb which result in the verb base which can then be conjugated with inflectional aspect morphology, among other processes, which are commonly referred to as *modes* in the Athabaskan literature.

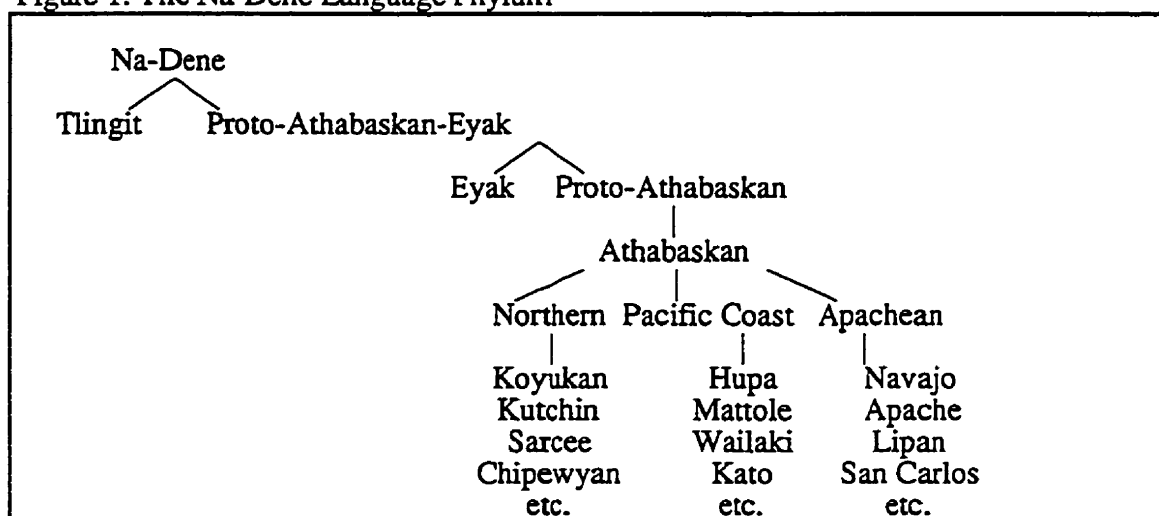
Presently, progress is being made on defining the complex Athabaskan verbal system from a more general, cross-linguistic perspective. Due to the complexity of the morphosemantic content of these languages, an accurate representation is not a simple task. Some effort has been made to place the lexical *aspect* categories into more general terms and understanding, however, little work has been done on the conjugational aspect or mode categories of these languages. In this thesis, two of these productive conjugational Chipewyan categories, imperfective and perfective aspect, are correlated with universal lexical aspect (or *aktionsart*) categories. That is, this thesis endeavors to uncover the morphosemantic characteristics of the imperfective and perfective aspect prefixes of Chipewyan by comparing them with Smith's (1991) universal situation types. Situation types involve the organization of lexical aspect in the verb system of a language. Such a comparison results in a preliminary morphosemantic classification of the Chipewyan verb system. Although this comparison is only the first step toward a complete analysis involving situation aspect, it will be suggested that further investigation in this direction will prove beneficial for uncovering details of Chipewyan verb organization.

The remainder of the Introduction places the Chipewyan language and the Athabaskan language family in both demographic and linguistic perspectives, and concludes with a summary of the organization of this thesis.

Genetic classification of the languages of North America has been a topic of much debate in the history of North American linguistics. The Athabaskan languages are included in Sapir's (1915) Na-Dene phylum with Tlingit and Haida. As Sapir himself notes, his proposal is merely suggestive providing no demonstrable evidence. Campbell and Mithun (1979) use Sapir's phylum as a point of departure and provide a classification

which includes the languages belonging to Na-Dene, among others. which is illustrated in Figure 1.

Figure 1: The Na-Dene Language Phylum



Na-Dene in Figure 1 is the same as Sapir's (1911) phylum in that the three major subfamilies of Proto-Athabaskan are still recognized. In contrast to Sapir, Campbell and Mithun (1979) include Eyak and exclude Haida in their phylum. The Na-Dene phylum includes the Athabaskan language family which is divided into three branches: Athabaskan, Pacific Coast Athabaskan, and Apachean. The languages of the two latter subfamilies exhibit homogeneity in their structures while the Northern Athabaskan languages are largely diverse, particularly in their phonology and morphology, making it difficult for researchers to agree upon a uniform subclassification within the Northern Athabaskan subfamily. The Northern Athabaskan group consists of 23 languages, including Chipewyan, which are spoken across Alaska and northwestern Canada. Among the North American native languages spoken in Canada, Chipewyan is the most widespread. It is spoken in the northern portions of Alberta, Saskatchewan, and Manitoba as well as across the Northwest Territories by an estimated 12,000 speakers.<sup>1</sup>

<sup>1</sup>This figure is from Cook's chapter on North American Linguistics in M. Dobrovolsky and W. O'Grady's *Contemporary Linguistic Analysis: An Introduction*.

More importantly, Chipewyan is acquired by children in four Saskatchewan communities.

The majority of my data is from the *Dēnē (Chipewyan) Dictionary with La Loche Dialect Additions: A Working Copy* by Leon W. Elford and Margorie Elford which was provided by the Northern Canada Evangelical Mission. Wherever possible dictionary entries specific to the La Loche dialect were chosen. I was lucky enough to be able to gather data from primary sources as well. These primary Chipewyan data and grammaticality judgments are from the community of La Loche, Saskatchewan which is located in the northwest portion of the province.<sup>2</sup> La Loche has a population of approximately 2,300, a large number of whom speak Chipewyan as a first language. I had the privilege of working with a variety of people from La Loche: I interviewed seventeen people over four months ranging in age from eighteen to seventy years old<sup>3</sup>. All but two of these consultants are fluent in both English and Chipewyan, where two consultants speak Chipewyan only: however any reading ability they all have extends only to English. I also worked with two primary consultants. Walter Park graciously allowed me to sit in on his Dene language classes at Dene High School as well as donate many hours of his time to answer my questions. Celina Janvier also let me sit in on her Dene classes at Ducharme Elementary School as well as give up many hours after school to teach me about her language. These two consultants are fluent in both English and Chipewyan, and are literate in both languages as well.

There are several reasons for choosing to elicit my primary data from La Loche, Saskatchewan. First, I feel a special tie to this community because my mother's family lived in La Loche and the surrounding area for over forty years. This bond to the

---

<sup>2</sup>All of the data in this thesis was gathered in La Loche by the author unless otherwise indicated.

<sup>3</sup>These Chipewyan consultants range in age, sex, and education level.

community is what initially sparked my interest in the Chipewyan language. Having a connection to the community also aided my research project in that my family name was familiar to the community facilitating my efforts to meet people. Second, the community of La Loche has a high percentage of people who speak Chipewyan as a first language which enabled me to meet with a variety of consultants. Third, little linguistic research has been completed on the La Loche dialect of Chipewyan and, therefore, it seemed a logical community to visit.

The organization of this thesis is as follows:

In chapter one, an overview of the Chipewyan grammar is provided. The focus lies on the phonological properties of the verb including the phonemic inventory, tone and syllable structure. Also, the three major syntactic categories of Chipewyan are discussed focusing on their general properties and their morphological structure.

In chapter two, a number of phonological processes typical of the Chipewyan verb are described and illustrated. Further, the morphological identities of a majority of the common verbal prefixes are provided; moreover, the functions of these prefixes are briefly examined. This chapter provides the reader with a general understanding of the phonological and morphological properties of the Chipewyan verb necessary as background information for discussing the focus of this thesis.

In chapter three, motivation for the correlation between universal situation types and imperfective and perfective aspect prefixes is given. Crosslinguistic perspectives of aspect and mode are discussed and compared with the Athabaskan usage of these same terms. Further, each Chipewyan prefix indicating imperfective and perfective aspect is identified and its surface forms are examined. This chapter illustrates the differing

distributions of aspect and mode in Chipewyan, and concludes that a correlation between universal situation types and imperfective/perfective aspect could provide insight into the reasons behind the distribution of the aspect prefixes.

Chapter four includes discussions of four previous analyses of verb classifications for a number of Athabaskan languages. These analyses range from traditional Athabaskan perspectives of semantics and morphology to an analysis which applies universal concepts to Athabaskan morphosemantic properties. It is demonstrated that three of the four proposals are beneficial for the intended correlation; however, they do not specifically account for the distribution under question. Despite their varying focuses, a great deal can be gained from each theory. Smith (1991), the fourth approach, is adopted and proves helpful for understanding the morphosemantic distribution of the aspect prefixes under discussion.

Given the properties of Smith's (1991) approach, the adopted model is used to correlate each pair of imperfective and perfective prefixes with the semantic features inherent for each situation type in chapter five. At this time more properties of each aspect prefix are provided to further substantiate each verb class resulting from the correlation. Some of the verb classes exhibit a large number of exceptions while others have very few exceptions. Possible reasons for these exceptions and their place within the adopted model are also discussed.

Last, chapter six includes a summary of the present investigation. Also, a discussion of a number of problems which result from the proposed analysis are outlined. These issues include the implications of lacking a one to one mapping between morphological and semantic characteristics as well as a discussion of methodological problems.

## CHAPTER 1

### ASPECTS OF CHIPEWYAN GRAMMAR

This chapter outlines the major phonological and morphosyntactic properties of Chipewyan in order to provide the reader with sufficient knowledge of the language to proceed with the discussion at hand. Section 1.1 addresses the phonemic inventory, tone, and syllable structure in order to provide the reader with a sense of the phonological structure of Chipewyan. Section 1.2 identifies three of the major morphosyntactic categories present in Chipewyan, nouns, postpositions, and verbs.

## 1.1 PHONOLOGY

### 1.1.1 The Phonemic Inventory and Orthography

The consonantal and vocalic phonemic inventories are given in Tables 1 and 2. In the consonantal inventory, the representation to the left of each slash is the IPA (International Phonetic Alphabet) symbol. The corresponding Chipewyan orthographic symbol is provided to the right of each slash. In some instances the IPA and orthographic symbol are the same.

Table 1: Consonantal Inventory (after Cook 1996)

Stops/Affricates	1	2	3	4	5	6	7	8
Plain	b	d (r)	dl	dō/ddh	dz	dž/j	g	ʔ
Aspirates		t	tʰ	tθ'/tth	ts	tš'/ch	k	
Glottalized		t'	tʰ'	tθ'/tth'	ts'	tš'/ch'	k'	
Sonorants	m	n						
Voiceless Fricatives			ʈ	θ/th	s	š/sh	x	h
Voiced Fricatives			l	ō/dh	z	j/y	γ/gh	

Note: 1=Labial, 2=Dental, 3=Lateral, 4=Interdental, 5=Alveolar, 6=Alveopalatal, 7=Velar 8=Glottal

There are eight places and six manners of articulation in Chipewyan. A three way contrast is exhibited in the stop/affricate sets: plain, aspirated, and glottalized stops. Further, the fricatives demonstrate a voiced/voiceless distinction.

The vocalic inventory in Chipewyan is less complicated in relation to the obstruent system as can be seen in Table 2.

Table 2: Vocalic Inventory ( after Cook 1983)

Oral	i	u	b. Nasal	ĩ	ũ
	e	ə/ẽ		ẽ	ẽ
	o				
	a				ą
Diphthongs: ai [əĩ], au [aw], ui [wi], ue [we], ua [wa], ie [je]					

As indicated in the two dimensional diagram indicating tongue height (low, mid, high) and tongue position (front, back) in Table 2, Chipewyan has five oral vowels as well as one reduced vowel which is represented as <ẽ><sup>1</sup> in the orthography. Each of the non-reduced oral vowels has a corresponding nasal vowel.

In addition to these simple vowels, seven diphthongs exist in Chipewyan as shown in Table 2 above. Further, diphthongs must be distinguished from the Consonant-Vowel (CV) pattern, i.e. *ai* versus *ay*. Cook (forthcoming) illustrates this difference by contrasting *k'áí* 'willow' and *tth'áy* 'plate' where the former makes use of a diphthong and the latter exhibits a CV pattern. This distinction is evident in the length of the CV pattern in contrast to the diphthong.

<sup>1</sup>Slash brackets <> are commonly used in reference to orthographic symbols, and are used in this instance because a difference in orthographic symbols is being discussed.



### 1.1.2 Tone

Chipewyan exhibits two tone or pitch accent qualities: high (H) and low (L) tone. Only high tone (ˈ) is marked on the vowels in the orthography. Contrasting word pairs are provided in (1) from Cook (forthcoming).

(1)	ya	‘sky’	vs.	yá	‘lice’
	sela	‘my cousin’	vs.	selá	‘my hand’
	tha	‘martin’	vs.	thá	‘a long time’
	deskoth	‘I cough’	vs.	deskóth	‘I am wide’

Cook points out that the tone in the words provided in both (1) and (2) are lexical.

Lexical tone can also be found in nominal, postpositional, and verbal prefixes. Examples of these are illustrated in (2).

(2)	Prefix	Description	Example	Gloss
a.	ní-	‘arrive at a point in time’	nínesa	‘I am arriving’
b.	íd-	‘first person duoplural’	nínída	‘We (dl) are returning’
c.	(h)í-	‘inchoative’ <sup>2</sup>	dígái	‘It has turned white’
d.	dá-	‘distributive’ <sup>3</sup>	nádáwúlzé	‘We want to hunt’

Aside from underlying tones, there are derived high tones which are not detailed in this section.

The final portion of this Chipewyan phonological synopsis is the syllable structure. Both syllabic constraints and corresponding examples are displayed in section 1.1.3.

### 1.1.3 Syllable Structure

The syllable structure of Chipewyan is relatively simple with no complex codas or onsets permitted (Cook, forthcoming). Furthermore, all consonants may occur in the onset of

---

<sup>2</sup>transitional in the Athabaskan literature

<sup>3</sup>collective plural

any given syllable, however, stops and affricates are not permissible in the coda position.

The syllable structures evident in Chipewyan are illustrated in (3).<sup>4</sup>

- |     |    |     |      |          |     |         |
|-----|----|-----|------|----------|-----|---------|
| (3) | a. | CV  | ɬi   | 'dog'    | tu  | 'water' |
|     | b. | CVC | gah  | 'rabbit' | bes | 'knife' |
|     | c. | CēC | shēn | 'song'   | tēn | 'ice'   |

From the constraints outlined in (3), all non-reduced vowels can occur in open and closed syllables. The occurrence of the reduced vowel in Chipewyan is also restricted by syllable structure, i.e. the reduced vowel cannot occur in an open syllable. Cook (1983) notes that the orthography developed by the Northern Canada Evangelical Mission (NCEM) appears problematic in relation to the restricted appearance of the reduced vowel in Chipewyan. The reduced vowel is represented as <ɛ> in the NCEM orthography and corresponds to <ë> in Table 2 above. Examples are provided in (4).

- |     |                        |       |              |
|-----|------------------------|-------|--------------|
| (4) | Present<br>Orthography | NCEM  | Gloss        |
| a.  | selá                   | selá  | 'my hand'    |
| b.  | nezq                   | nezq  | 'it is good' |
| c.  | setá                   | setá  | 'my father'  |
| d.  | tēn                    | tēn   | 'ice'        |
| e.  | chēth                  | cheth | 'duck'       |

If the reduced vowel cannot occur in an open syllable position, as stipulated above, and the following consonant is required to appear in the onset of the next syllable, the examples in (4) such as [se.lá] where [.] represents a syllable break, should not be permissible. Cook solves this problem by suggesting that intervocalic consonants ambisyllabify in connected speech; the consonant can occupy both the coda of the first syllable as well as the onset of the next syllable. That is, if the consonant is not ambisyllabified, then <ë>, the reduced vowel, becomes <e>, the full vowel. Some examples from Cook are provided in (5).

---

<sup>4</sup>A few exceptions to the syllable structure constraints in Chipewyan exist such as *sɬɪnɪ* 'evil' and *sni* 'it is said'. According to Cook (personal communication) when material is not generally permitted by constraints of a particular language, exceptions are expected to be coronal in place of articulation which is considered unmarked. Both of these consonant clusters are coronal which supports the notion that consonant clusters are not formally permitted in Chipewyan.

- (5)
- |    |      |         |          |              |
|----|------|---------|----------|--------------|
| a. | selá | [se.lá] | [sɛl.lá] | 'my hand'    |
| b. | nezq | [ne.zq] | [nɛz.zq] | 'it is good' |
| c. | setá | [se.tá] | [sɛt.tá] | 'my father'  |

For example, <selá> in (6a) is pronounced as [se.lá] with a full vowel when ambisyllabification does not occur, but is pronounced as [sɛl.lá] with a reduced vowel when ambisyllabification takes place. Due to this suggested ambisyllabification it can be maintained that the full vowels appear in open syllables restricting the reduced vowel, <ɛ>, to closed CɛC syllables. Hence, <e> replaces <ɛ> in open syllables. This is also supported by the fact that only full vowels are permissible in word final position which is the case in (3a) for ɬi 'dog' and tu 'water'.

## 1.2 MORPHOSYNTACTIC CATEGORIES

This section serves to provide a broad description of the more common word classes in Chipewyan. The Chipewyan language exhibits three main categories of words which include nouns, postpositions, and verbs. Words that are translated into adjectives are not included in this discussion because they are considered to be verbs in Chipewyan, and will be discussed in the next subsection. The subsections to follow provide examples and explanations of each of these three word classes. The descriptions of each of the three categories is primarily based on the work of Li (1946) and Cook (forthcoming).

### 1.2.1 Nouns

Chipewyan nouns are quite complex with a large number of subclasses apparent in the grammar. Five of the more common types of Chipewyan nouns are discussed here, a list of which is provided in (6).

(6)

a.	bēr	'meat'	ɬi	'dog'	bes	'knife'	sa	'sun'
b.	setá	'my father'	nelá	'your hand'	setsi	'my nose'	bela	'his/her cousin'
c.	ts'ékuaze	'girl'	dezaze	'creek'	ɬichogh	'horse'	Beschogh	'American'
d.	yaɬti kqé	'church'	kóntué	'whiskey'	chəʔih	'rain'		
e.	honi	'story'	yati	'language'	názé	'hunt'	dekoth	'cough'

The nouns such as *bēr* 'meat' and *ɬi* 'dog' illustrated in (6) are commonly referred to as bare nouns (Li 1946, Cook forthcoming). These most basic nouns are typically monosyllabic expressing no inflectional or derivational information.

The nouns in (6b), such as *setá* 'my father' and *nelá* 'your hand', are kinship terms and body parts which are commonly referred to as inalienably possessed nouns. These are nouns which inherently require possession. Other types of nouns can also occur with possessive prefixes but only the class of nouns in (6b) requires possessive morphology. The possessive prefixes are listed in (7).

(7)	Prefix	Person/ Number	Gloss	Prefix	Person/ Number	Gloss
	se-	1 sg	'my'	nuhe-	1 dp	'our'
	ne-	2 sg	'your'	nuhe-	2 dp	'your/our (pl)'
	be-	3 sg	'his/hers'	hube-	3dp	'their'
	ye-	4 sg	'his/hers'			

To gain an understanding of the nouns in (6b) examine *nelá* 'your hand'. The prefix *ne-* represents second person singular and the stem *-lá* means 'hand'. The stem cannot occur alone (\*-lá). All kinship terms and body parts are included in this class.

The nouns of (6c) occur with the enclitics *-aze* 'diminutive' and *chogh* 'augmentative'. For example, *ɬichogh* 'horse' is an opaque noun which is constructed with *ɬi* 'dog' plus *chogh* 'augmentative' resulting in a literal translation of 'big dog'.

A fourth group of Chipewyan nouns is exemplified in (6d). These are compound nouns. For example, examine *kóntué* ‘whiskey’. This noun consists of the nouns *kón* ‘fire and *tu* ‘water’ as well as the suffix *-é* resulting in the term for ‘whiskey’, *kóntué*.<sup>5</sup>

Both Cook (forthcoming) and Li (1946) suggest a class of verbal nouns in Chipewyan which is illustrated in (6e): these are also listed and compared with the corresponding verbs in (8). These nouns are similar in that they are all related to verbs. Some verbs and nouns share the same root in Athabaskan, which is the case for the nouns in (6e); however, these nouns also share the same thematic (derivational) prefix with the related verb.

(8) Noun	Verb
a. <i>názé</i> ‘hunt’	<i>ná-l-zé</i> ‘s/he is hunting’
b. <i>honi</i> ‘story’	<i>ho-l-ni</i> ‘s/he is telling a story’
c. <i>yati</i> ‘language’	<i>ya-l-ti</i> ‘s/he is talking’
d. <i>dekoth</i> ‘cough’	<i>de-l-koth</i> ‘s/he is coughing’

For example, the noun *honi* ‘story’ consists of the prefix *ho-*, which is commonly referred to as *areal*, as well as the stem *-ni*. In comparison, the verb *holni* ‘he/she is telling a story’ is comprised of the aforementioned *ho-* and *-ni* as well as an *l-* classifier.

This list of noun classes is certainly not exhaustive but it includes the more common noun types in Chipewyan. The next subsection briefly discusses postpositions in Chipewyan.

### 1.2.2 Postpositions

Cook (forthcoming) suggests that there are approximately forty postpositions in Chipewyan. This closed class of words is closely related morphologically to nouns

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<sup>5</sup>Cook (forthcoming) observes that the suffix *-é* occurs in nouns of possession as well as in a number of compound nouns. This is a common suffix in Chipewyan nouns, however, due to the varying nature of this suffix a definition is not possible at this time.

because postpositions generally use the same set of pronominal prefixes as nouns.<sup>6</sup>

Contextual examples of Chipewyan postpositions from Cook (forthcoming) are provided in (9).

(9)

a.	<i>ch'a</i>	'away from'	b.	<i>ba</i>	'for / in the absence of'
	<i>sech'a</i>	'away from me'		<i>seba</i>	'for me'
	<i>nech'a</i>	'away from you'		<i>neba</i>	'for you'
	<i>bech'a</i>	'away from him/her'		<i>beba</i>	'for him'
	<i>bech'a nesjer</i>	'I am afraid of him'		<i>kontué neba</i>	'whiskey is no
				<i>nezyle</i>	good for you'
	<i>bech'a ʔi nesjer</i>	'I am afraid of dogs'		<i>kontue beba ʔi</i>	'whiskey is not
				<i>nezyle</i>	good for dogs'

Postpositions are inflected for person and number: for example, *sech'a* 'away from me' is comprised of *se-* 'first person singular', related to the possessive noun form *se-*, and the postposition *ch'a* 'away from'. In relation to the formation of the postposition *ba* 'for' in (9b), Cook observes that the meaning of this particular postposition is rather innovative. In conservative dialects, 'for' is *xa* whereas *ba* refers to 'for/in the absence of'. In contrast, *ba* has become more general in meaning in the innovative dialects and is commonly translated as 'for'.<sup>7</sup>

Overall, it has been demonstrated that postpositions are not always transparent semantically. Morphologically speaking, however, postpositions share pronominal prefixes with Chipewyan nouns but they remain a category separate from nouns.

### 1.2.3 Verbs

A Chipewyan verb can represent a full sentence where grammatical categories such as person, aspect, and/or mode are marked by prefixes and enclitics in the verb and by stem variation. For this reason Chipewyan verbs have a highly complex internal structure

<sup>6</sup>Exceptions to this generalization are *ho-* 'areal' which cannot be used with postpositions and *ʔe-* 'third person non-specific' which cannot be used with nouns.

<sup>7</sup>This is the case in the La Loche dialect where young speakers, in particular, use *ba-* to mean 'for' rather than 'in the absence of'.

which is discussed in more detail in chapter two. Both active and stative verbs are present in the verb corpus as evident in the list of verbs provided in (10).

(10) Verbs

- a. *hedq* 'he is drinking it', *yeneŋʔi* 'she looks at him'
- b. *nechá* 'it is big', *nedáth* 'it is wide'
- c. *delzēn* 'it is black', *delgai* 'it is white'

The verbs *hedq* 'he is drinking it' and *yeneŋʔi* 'she looks at him' in (10a) are active verbs which are typically inflected in three aspect/mode paradigms: imperfective, perfective, and optative. Verbs of this type comprise a majority of the verb corpus discussed in this thesis. Verbs such as *nechá* 'it is big' of (10b) are descriptive verbs and are semantically similar to English adjectives. These adjectival forms are considered verbs because they inflect for person, number, and aspect, however, they have different derivational properties from the verbs of (10a): these are discussed in detail in chapter five. The verbs *delzēn* 'it is black' and *delgai* 'it is white' in (10c) are also descriptive verbs primarily consisting of colour terms. These verbs also have special derivational properties which are discussed below.

### 1.3 CONCLUSION

This chapter briefly outlined the phonological and morphosyntactic structures of Chipewyan which should suffice to understand the overall grammar of the language insofar as is required for the present investigation. Because the verbal structure is closely related to the focus of this thesis, a detailed discussion of the phonology and morphology of the verb is given in chapter two.

## **CHAPTER 2**

### **THE PHONOLOGICAL AND MORPHOLOGICAL STRUCTURE OF THE VERB**

The Chipewyan verb demonstrates elaborate morphological and phonological structures, and typically contains all of the elements in an English sentence. The Chipewyan verb is comprised of a verb root plus a variety of prefixes marking person, number, aspect, and mode. Also included in the verb are thematic (derivational) and adverbial material.

Given the complexity of the Chipewyan verb, it is difficult to characterize its morphophonological structure and derivation. This chapter provides a basic outline of the morphophonological processes common in the Chipewyan verb. These processes are not focal to this thesis but are a necessary part of the foundation required for examining Chipewyan verbs in any detail. In addition to these processes, many verbal prefixes present in a majority of verbs are identified, and their locations within the verbal template are given. Once the identity and location of these prefixes are established, the levels of representation in verb formation are also addressed.

#### **2.1 MORPHOPHONOLOGY**

Athabaskan languages are highly synthetic and have many phonological processes which can obscure the underlying representation of a given verb. An outline of the relevant phonological rules will simplify matters. Five rules are outlined in this section. These are (1) epenthesis, (2) metathesis, (3) tensing, (4) nasalization and (5) vowel deletion. Prior to the descriptions of these processes an explanation of the difference between conjunct and disjunct prefixes in Chipewyan is provided.



### 2.1.1 Conjunct and Disjunct Prefixes

As Cook (1984) notes, descriptive work on the Athabaskan languages establishes approximately ten prefixal positions in the verb which can be categorized into inflectional prefixes and derivational prefixes on a morphological level. These prefixal positions have also been divided into conjunct and disjunct prefixes which is a morphophonological distinction first identified by Li (1946). According to Li, the difference between conjunct and disjunct prefixes is based on varying morphophonemic alternations as well as positioning within the Athabaskan verb. This division is indicated by #. A disjunct boundary, placed to the left of the object prefix, exists in virtually every Athabaskan language where prefixes to the right of the disjunct boundary are conjunct prefixes and prefixes to the left of this same boundary are disjunct prefixes.

The distinction between conjunct and disjunct boundaries is motivated by evidence from phonological rules such as deletion, coalescence, and nasalization which apply among conjunct prefixes: i.e. but not among disjunct prefixes or across the disjunct boundary. The distinction between conjunct and disjunct prefixes is further supported by processes such as epenthesis which apply only before disjunct prefixes: i.e., not among conjunct prefixes.

Aspect, mode, and person markers are included in the list of conjunct prefixes. These markers are located closer to the stem than the disjunct prefixes. Further, the surface representations of the conjunct prefixes are more opaque than those of the disjunct prefixes. Examples of the conjunct prefixes are given in (1) and are used in conjunction with nasalization of the second person singular prefix.

- (1)    a.    th̥ida    /the-ne-Ø-da/<sup>1</sup>    ‘you are sitting’  
          b.    ghij̥ën    /ghe-ne-d-yën/    ‘you sang’

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<sup>1</sup>Slash brackets (/.../) are used to represent the underlying morphophonemic representations of individual verbs throughout this thesis.

First, *thida* ‘you are sitting’ in (1a) is comprised of *the-*, a perfective aspect prefix, a second person singular prefix *ne-*, an unmarked or  $\emptyset$ - classifier, and the verb stem *-da* ‘to be in sitting position’. Second, *ghijēn* ‘you sang’ in (1b) has a *ghe-* perfective aspect prefix, a second person singular prefix *ne-*, a *d-* classifier, and the verb stem *yēn* ‘to sing’. The surface representations found in (1a-b) are different from the underlying structures with, *ne-*, the underlying second person singular marker, being realized as nasalization on the vowel of the preceding aspect prefix in the surface realization. This particular realization of the second person marker only happens when the preceding morpheme is a conjunct prefix.

In contrast to conjunct prefixes, disjunct prefixes are further from the stem, are more phonologically independent, and are more transparent. These prefixes include adverbials prefixes, similar to adverbs in English, and thematic prefixes, those that represent derivational (lexical) prefixes, among others. Consider the disjunct prefixes exemplified in (2).

- (2) a. *shéneti* /shé#ne-ti/ ‘you are eating’  
 b. *yanełti* /ya#ne-ł-ti/ ‘you are talking, praying’

The verb *shéneti* ‘you are eating’ in (2a) has the disjunct prefix *shé-*, the second person singular prefix *ne-*, an unmarked classifier, and the verb stem *-ti* ‘to eat’. The verb *yanełti* ‘you are talking, praying’ in (2b) has the disjunct prefix *ya-*, a second person singular *ne-* prefix, an *ł-* classifier, and the verb stem *-ti* ‘to talk, pray’. Both of the verbs in (2a-b) have identical underlying and surface representations. In particular, the second person singular prefix *ne-* is not realized as nasalization on the surface.

### 2.1.2 Epenthesis

The first Chipewyan process is epenthesis which refers to a two step process where *h* and/or *e* are sequentially inserted. Epenthesis often occurs in word-initial position or when

following a proclitic (or incorporated PP), and this boundary is called the double disjunct boundary (##). Examples are provided in (3).<sup>2</sup>

(3) Epenthesis

- a. ##s-d-yën → hesjën      'I sing (imp)'  
I-sing
- b. ##-d-yën → hejën      'He sings (imp)'

Both /s-d-yën/ 'I sing' and /d-yën/ 'he sings' are monosyllabic verbs underlyingly; however, Chipewyan requires verbs to have a minimum of two syllables, providing an environment for epenthesis. First, *e-* is inserted at the double disjunct boundary providing a syllable to house the non-syllabic first person singular prefix (*s-*). Second, the epenthetic *h-* is inserted to fulfill the requirement that Chipewyan verbs begin with a consonant. In some instances both epenthetic elements are not required. That is, if a verb begins with a vowel and already has two syllables only *h* is inserted at the double disjunct boundary. Consider the data in (4).

- (4) a. ##íd-d-yën → híjën      'We sing (imp)'  
1d-sing
- b. ##uh-d-yën → huhjën      'You (dl) sing (imp)'  
2d-sing

In /íd-d-yën/ 'we sing (imp)' and /uh-d-yën/ 'you (dl) sing (imp)' of (4a-b), respectively, only *h* is inserted at the double disjunct boundary because both the verbs have two syllables underlyingly.

### 2.1.3 Metathesis, Tensing, and Nasalization

It is best to discuss metathesis, tensing, and nasalization together because each process acts as a trigger for the following process. Cook (1989) outlines these same processes jointly for

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<sup>2</sup>There appear to be three boundaries in relation to morphophonological processes in Chipewyan which are the double-disjunct boundary (##), the disjunct boundary (#), and the conjunct boundary (-). The double-disjunct boundary includes all positions to the left of the adverbial position (position 10) see example (10). The disjunct boundary, as already explained, refers to everything to the left of the direct object prefix. The conjunct prefix refers to all of the prefixes between the direct object prefix and the verb stem.

Chilcotin. According to Cook (1989) metathesis occurs in prefixes with the form *Ce-*. This discussion focuses on the metathesis of the second person singular prefix *ne-* which is the most common environment in which metathesis occurs. In the Chilcotin verb, Cook notes that the second person prefix most commonly appears as *-en*, where metathesis has taken place. Consider the data in (5).

(5) <u>Metathesis and Epenthesis in Chilcotin</u>				
	Underlying Representation	Metathesis	Epenthesis	Gloss
a.	<i>ne-jen</i>	<i>enjen</i>	<i>henjen</i>	'you sing'
b.	<i>sa##ne-jen</i>	<i>sa##enjen</i>	<i>sahenjen</i>	'you sing for me'
c.	<i>ne-zugh</i>	<i>enzugh</i>	<i>henzugh</i>	'you scrape it'

In (5a) *henjen* 'you sing', metathesis of the second person prefix has taken place where *ne-* becomes *en-*; moreover, notice that *h-* epenthesis follows metathesis. Like Chipewyan, Chilcotin requires verbs to be consonant initial. That is, Chilcotin also requires epenthesis at the double disjunct boundary and this environment is created by second person metathesis (*ne-* → *en-*). This is illustrated in *sahenjen* (/sa##ne-d-yen/) 'you sing for me' of (5b) where *h-* epenthesis is required after *ne-* metathesis at the double disjunct boundary. Hence, *sa##* (se-ba) 'for me' sits to the left of the double disjunct boundary position resulting in *h-* epenthesis between *sa##* and the metathesized second person singular *en-*.

According to Cook (1989) metathesis provides an explanation for the appearance of a tense vowel after a conjunct prefix (e.g., *ghe-ne-* → *ghe-en* → *ghin*). Examples of Chilcotin tensing are provided in (6).

(6) <u>Metathesis and Tensing</u>				
	Underlying Representation	Metathesis	Tensing	Gloss
a.	<i>na#ghe-ne-jen</i>	<i>na#ghe-en-jen</i>	<i>naghinjen</i>	'you sang again'
b.	<i>ghe-ne-yán</i>	<i>ghe-en-yán</i>	<i>ghinyán</i>	'you ate it'

In (6a) *naghinjen* ‘you sang again’, metathesis of the second person prefix takes place creating the environment for tensing where *ghe-en* → *ghin*. Chipewyan has a phonological rule similar to Chilcotin tensing in which *ghe-ne-* is realized as *ghĩ-*. The Chipewyan cognates are illustrated in (7).

(7) <u>Metathesis, Tensing, and Nasalization in Chipewyan</u>					
	Underlying Representation	Metathesis	Tensing	Nasalization	Gloss
a.	<i>ghe-ne-jën</i>	<i>ghe-en-jën</i>	<i>ghin-jën</i>	<i>ghĩjën</i>	‘you sang’
b.	<i>shé-ghe-ne-tĩ</i>	<i>shé-ghe-en-tĩ</i>	<i>shéghintĩ</i>	<i>shéghĩtĩ</i>	‘you ate’

As can be seen above in *ghĩjën* ‘you sang’ of (7a), the 2 sg form, *ne-*, is metathesized (*ghe-ne-* → *ghe-en*) which is followed by the same tensing process that occurs in Chilcotin (*ghe-en* → *ghin*). Tensing is then followed by nasalization of the second person singular form where nasalization is defined as the absorption of nasal qualities into the preceding vowel resulting in a nasalized vowel and deletion of the nasal consonant. Nasalization is demonstrated in (8).

(8) <u>Chipewyan Nasalization</u>			
	Nasalization	Nasal Deletion	Surface Form
<i>nin-ʔĩ</i>	<i>nĩn-ʔĩ</i>	<i>nĩ-ʔĩ</i>	<i>nĩʔĩ</i>

First, the nasal qualities of the nasal consonant are absorbed by the vowel, followed by deletion of the nasal consonant.<sup>3</sup> As a result of the additional process of nasalization, greater variation between the underlying and surface forms is more common in Chipewyan than in Chilcotin.

#### 2.1.4 Vowel Deletion

In relation to Chipewyan verbal paradigms, vowel deletion is the last morphophonological process to be discussed. Essentially this process is defined as follows: when two vowels are adjacent, the vowel to the left deletes. This process occurs between both disjunct and

<sup>3</sup>This process can be viewed as nasal spreading and subsequent deletion of the vowel. Because a theory of autosegmental features is not presented in this thesis, nasal spreading is not discussed here.

conjunct prefixes but does not occur to the left of the double disjunct boundary. A verb paradigm exhibiting vowel deletion is given in (9).

(9) 'to sing d-yën

Person/ Number		Perfective
1s	ghesjën	/ghe-s-d=yën/
2s	ghijën	/ghe-ne-d=yën/
3s	ghejën	/ghe-Ø-d=yën/
1d	ghíjën	/ghe-íd-d=yën/
2d	ghuhjën	/ghe-uh-d=yën/
3d	heghejën	/he-ghe-d-yën/

Note: 1s=first person singular, 2s=second person singular, 3s=third person singular, 1d=first person dual, 2d=second person dual, 3d=third person dual<sup>4</sup>

The focus of this particular paradigm is the 1d and 2d forms. Notice that in the underlying form of the 1d form *ghíjën* 'we sang' there are two adjacent vowels ; /ghe-íd-d-yën/. As already explained, when two vowels are adjacent the vowel to the left deletes. Hence, in the 1d form /ghe-íd-d-yën/ 'we sang' the leftmost vowel from the *ghe-* prefix deletes resulting in the surface form *ghíjën*. The same process occurs in the 2d form /ghe-uh-d-yën/ 'you guys sang' where the vowel from the *ghe-* prefix is deleted resulting in the surface form *ghuhjën*.

The discussion above provides the basic background in verbal morphophonology of Chipewyan necessary for an analysis of situation type and aspect in the verbal paradigms. Before this analysis commences, however, it is necessary to identify several of the more common prefixes of the Chipewyan verb.

<sup>4</sup>First, second, and third person plural forms also exist in Chipewyan; however, they are not presented in this thesis because dual and plural forms are the same morphophonologically except that the plural forms have the distributive prefix *dá-* added in position 9 of the verb. See Cook (forthcoming) for details.

## 2.2 VERBAL PREFIXES

As mentioned, Chipewyan is a highly synthetic language in which the verb has rich person and number agreement as well as aspect/mode marking. In order to ultimately provide a correlation between the morphological and semantic properties of Chipewyan verbs it is beneficial to identify the individual prefix positions of the verb.

Athabaskan verb prefixes are analyzed into more or less a dozen prefixes appearing to the left of the verb root/stem by Li (1946), Sapir and Hoijer (1967), Kari (1979), and Cook (forthcoming)<sup>5</sup>. Li (1946) proposes ten prefixal positions in the Chipewyan verb in contrast to Cook (forthcoming) who postulates eleven prefixal positions. Cook's proposal is being adopted in this thesis because he provides detail for each position he proposes. As noted, the Athabaskan prefixes include inflectional prefixes which mark person, number, aspect, and mode as well as thematic (derivational) and adverbial prefixes. Cook's suggested prefixal positions are illustrated in (10).

(10)

11	10	9	8	7	#	6	5	4	3	2	1	0
P	Adv	dá	na	NI		DO	Nonlocal subject	Th	CM	Local subject	Cl	Stem

Note:

- |  |                                 |
|--|---------------------------------|
| 1=Classifier                             | 7=Incorporated nouns            |
| 2=Local (1 or 2 person) subject prefixes | 8=Iterative prefix              |
| 3=Conjugation markers                    | 9=Plural or distributive prefix |
| 4=Thematic (derivational) prefixes       | 10=Adverbial prefixes           |
| 5=Nonlocal (3rd person) subject prefixes | 11= Incorporated Postpositions  |
| 6=Direct object                          |                                 |

The subsections which follow provide a detailed description of each of the prefixal positions given in the same order as they are provided in (10). Each discussion involves only a subset of the items in a given position. The subset discussed are the most common prefixes found in the data provided throughout this thesis.

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<sup>5</sup>See section 2.3 for an explanation of the distinction between the verb root and the verb stem.





the  $\dot{\text{t}}$ - classifier. This inchoative-causative distinction is often labelled intransitive-transitive in the traditional Athabaskan literature. Other distinctions such as active/passive and reversative/non-reversative are also illustrated in the grammar by classifiers as illustrated in (11). Despite the typical functions of the classifiers identified in (11a-c), many idiosyncratic uses of the classifiers are also present in the grammar. Consider the verb in (12).

- (12)  $\text{ya}\dot{\text{t}}\text{ti}$   
 $\text{ya} - \emptyset - \dot{\text{t}} - \text{ti}$   
 adv.-3-cl-talk(stem)  
 'he is talking, praying'

As illustrated in (11a) with  $\text{d}\dot{\text{t}}\dot{\text{t}}\text{k}'\text{q}$  (/d $\acute{\text{e}}$ -ne- $\dot{\text{t}}$ - k $\acute{\text{a}}$ /) 'you made a fire', the  $\dot{\text{t}}$ - classifier commonly occurs with verbs that are transitive or causative. This is not true of the verb  $\text{ya}\dot{\text{t}}\text{ti}$  'he is talking, praying' given in (12). Here the alleged transitive classifier appears with an intransitive verb. Recall from (11b) that the  $\dot{\text{t}}$  classifier can also denote that a verb is active, but this is not the case in (12) (see Cook forthcoming). In many cases the specific functions of a particular classifier are largely predicatable but exceptions exist.

Moreover, all classifiers are subject to phonological rules which obscure their identity. First, a perfective paradigm containing the  $\text{l}$ - classifier is illustrated in (13).

(13) 'to cough  $\text{de-...l-koth}$

Person/ Number	Perfective	
1s	$\text{deghe}\text{s}\text{koth}$	/de-ghe-s-l-koth/
2s	$\text{deghe}\dot{\text{h}}\text{l}\text{koth}$	/de-ghe-ne-l-koth/
3s	$\text{deghe}\text{l}\text{koth}$	/de-ghe- $\emptyset$ -l-koth/
1d	$\text{deghe}\dot{\text{h}}\text{l}\text{koth}$	/de-ghe- $\acute{\text{e}}$ -l-koth/
2d	$\text{deghe}\dot{\text{u}}\text{l}\text{koth}$	/de-ghe-uh-l-koth/
3d	$\text{hereghe}\text{l}\text{koth}$	/he-de-ghe-l-koth/

A number of phonological rules are evident in the above data. First, it is the case that no more than two consonants can be adjacent in Chipewyan. For example the 1s form

*deghekoth* /de-ghe-s-l-koth/) ‘I coughed’ in (13) has three adjacent consonants: *s*- the first person singular marker, the *l* - classifier, and the stem initial consonant *k*. This three consonant environment results in the deletion of the *l*- classifier. Second, whenever the consonants *h* and *l* are adjacent a merger to *ɬ* takes place. An example of this environment can be found in the 2d form *deghuɬkoth* /de-ghe-uh-l-koth/ ‘you (dl) coughed’ of (13). In the underlying representation of the 2d form /de-ghe-uh-l-koth/ *uh*- and *l* are adjacent, resulting in a merger to *uɬ* in the surface form.

The perfective paradigm in (14) illustrates a phonological rule relevant to the *ɬ*- classifier.

(14) ‘to talk’	ya#...ɬ-ti		Perfective
Person/ Number			
1s	yaghiɬti		/ya#ghe-i-ɬ-ti/
2s	yaghɬti		/ya#ghe-ne-ɬ-ti/
3s	yaghiɬti		/ya#ghe-(N)-Ø-ɬ-ti/ <sup>6</sup>
1d	yaghɬti		/ya#ghe-íd-ɬ-ti/
2d	yaghuɬti		/ya#ghe-uh-ɬ-ti/
3d	yaheghɬti		/ya#he-ghe-(N)-ɬ-ti/

In (14) consider the 1d form *yaghɬti* /ya#ghe-íd-ɬ-ti/ ‘we talked’ where a phonological process involving the *ɬ* - classifier and the first person duoplural prefix, *íd*-, applies. This rule changes the adjacent *d* and *ɬ* in the underlying representation of the 1d form /ya#ghe-íd-ɬ-ti/ in (14) to a merged form, *l*, in the surface structure.

The *d* classifier is largely obscured in Chipewyan verbs resulting in surface forms which vary greatly from their underlying representations. This is often referred to as the ‘D-effect’. Cook (1989:159) defines the D-effect as follows: “[d] is deleted before a

<sup>6</sup>The nasalization on the vowels in the 3 and 32 forms, represented as (N) in the verb paradigms in this thesis, is the surface realization of the N- perfective. This nasalization is present only on verbs which occur with either a Ø- or *ɬ*- classifier and the *ghe*- perfective prefix. Cook (1989) suggests that the N- perfective is a reflex of a once systematic perfective prefix. Due to the restricted appearance of the N- perfective not discussed as part of the systematic inflectional system.

stop/affricate or becomes merged with a continuant, resulting in an affricate which is not distinguishable from an underlying affricate”.<sup>7</sup> A list of the common root initial changes resulting from the D-effect are provided in (15).

(15)	Environment		Result	Example	Breakdown	Gloss
a.	d + y	→	j	hesjēn	/he-s-d-yēn/	‘I am singing’
b.	d + ʔ	→	tʰ	senetʰi	/se-ne-d-ʔi/	‘I am being looked at’
c.	d + gh	→	d	nínesda	/ní-ne-íd-d-gha/	‘I am returning’

In (15a) *hesjēn* /he-s-d-yēn/ ‘I am singing’ and (15b) *senetʰi* /se-ne-d-ʔi/ ‘I am being looked at’ the *d*- classifier and the root initial consonant merge into one consonant on the surface which contains properties of both underlying consonants. For example, in (15b) *senetʰi* /se-ne-d-ʔi/ ‘I am being looked at’ the resulting consonant maintains the same place of articulation as the *d*- classifier and the same manner of articulation, glottalized, from the root initial consonant: d + ʔ = tʰ. Deletion of the root initial consonant is also a possible result of the D-effect as illustrated in (15c) with *nínesda* /ní-ne-íd-d-gha/ ‘I am returning’: d + gh = d. The paradigm given in (16) illustrates two of the resulting surface forms created by the D-effect..

(16) ní#..d-gha/ya/ghēl (gh=y) ‘to return’

b.	Person/ Number		Imperfective		Perfective
	1s	nínesda	/ní-ne-s-d-gha/	nínesja	/ní-ne-s-d-ya/
	2s	nínjda	/ní-ne-ne-d-gha/	nínjja	/ní-ne-ne-d-ya/
	3s	nída	/ní-Ø-ne-d-gha/	níja	/ní-Ø-ne-d-ya/
	1d	nínída	/ní-ne-íd-d-gha/	nídēl	/ní-ne-íd-d-ghēl/
	2d	nínuda	/ní-ne-uh-d-gha/	nuhdēl	/ní-ne-uh-d-ghēl/
	3d	nínjda	/ní-he-ne-d-gha/	henídēl <sup>8</sup>	/ní-he-ne-d-ghēl/

<sup>7</sup>Gordon (1997) proposes that the effect of the *d*- classifier is acoustically detectable by speakers of Navajo; however, it has no greater influence than syntactic classes on the distinction between underlying and surface forms does in Navajo. See Gordon (1997) for details.

<sup>8</sup>Notice that the third person dual prefix *he-* and the thematic prefix *ní-* metathesize. Metathesis involving the third person dual and plural prefixes is quite common. A satisfactory explanation of this phenomena is not available at this time.

First, in the imperfective paradigm the *d* classifier appears on the surface and the adjacent underlying root initial fricative is deleted:  $d + gh = d$ . Second, the process occurring in the 1s, 2s, and 3s forms of the perfective paradigm involves a merger of the *d*- classifier and the stem-initial consonant *y* resulting in an affricate on the surface:  $d + y = j$ .

Overall, classifiers are well known for their varying underlying and surface forms, as well as their grammatical functions such as transitive/intransitive.

### 2.2.2 Pronominal Prefixes

In Chipewyan the subject prefixes are divided into local (first or second person) subjects and nonlocal (third person) subjects where local prefixes are located in position 2 in (10) and nonlocal subjects are found in position 5 of (10). Cook (forthcoming) points out that this dichotomy has significant ramifications in the morphology and syntax of Chipewyan. For example, the number contrast between singular and dual is obligatory only for local subjects.<sup>9</sup> The Chipewyan subject prefix forms are illustrated in (17).

#### (17) *d-yën* 'to sing'

Person/ Number	Subject Prefixes	Imperfective		Perfective	
1s	s- (i-)	hesjën	/Ø-s-d-yën/	ghesjën	/ghe-s-d-yën/
2s	ne-	nejen	/Ø-ne-d-yën/	ghijën	/ghe-ne-d-yën/
3s	Ø-	hejën	/Ø-Ø-d-yën/	ghejën	/Ø-ghe-d-yën/
1d/1p	íd-	hijën	/Ø-íd-d-yën/	ghijën	/ghe-íd-d-yën/
2d/2p	uh-	huhjën	/Ø-uh-d-yën/	ghuhjën	/ghe-uh-d-yën/
3d/3p <sup>10</sup>	he-	hehejën	/he-Ø-d-yën/	heghejën	/he-ghe-d-yën/

The distinct positions of the local versus nonlocal subject prefixes are evident in the perfective paradigm for 'sing'. Notice that the 1s form *ghesjën* /ghe-s-d-yën/ 'I sang'

<sup>9</sup>See Cook (1996) for details on the distinction between local and nonlocal subject prefixes.

<sup>10</sup>The subject prefixes for dual and plural are the same; however, the plural verb forms also have the distributive *dá-* prefix in position 9: *dághijën* 'we (pl) sang', *dághuhjën* 'you (pl) sang', *dáheghejën* 'they (pl) sang'

and 2s form *ghijjēn* (/ghe-ne-d-yēn/) ‘you sang’ in (17) exhibit subject prefixes occurring to the right of the perfective prefix *ghe-*. In contrast, the 3d form *heghejēn* /he-ghe-d-yēn/ ‘they sang’, *he-*, occurs to the left of the *ghe-* perfective prefix.<sup>11</sup>

The 1s form of some of the perfective paradigms of verbs exhibit *i-* which is an allomorph of *s-*. According to Cook (forthcoming), *i-* occurs in the perfective paradigms of verbs which occur with  $\emptyset$ - or *ɪ*- classifiers. See Cook (forthcoming) for details on this topic.<sup>12</sup>

Another issue related to Chipewyan pronominal prefixes is their varying underlying and surface representations when they follow conjunct and disjunct prefixes. Generally, the surface and underlying forms of the subject prefixes are identical. The second person singular pronominal prefix, *ne-*, however, does not have matching underlying and surface verb forms. Consider the data in (18).

(18) *shé#..Ø-t̥i* ‘to eat’

Person/ Number		Imperfective		Perfective
1s	<i>shést̥i</i>	/shé-Ø-s-Ø-t̥i/	<i>shéghest̥i</i>	/shé-ghe-s-Ø-t̥i/
2s	<i>shénet̥i</i>	/shé-Ø-ne-Ø-t̥i/	<i>shég̃h̥t̥i</i>	/shé-ghe-ne-Ø-t̥i/
3s	<i>shét̥i</i>	/shé-Ø-Ø-Ø-t̥i/	<i>shéghest̥i</i>	/shé-Ø-ghe-t̥i/
1d	<i>shít̥i</i>	/shé-Ø-íd-Ø-t̥i/	<i>shég̃h̥t̥i</i>	/shé-ghe-íd-Ø-t̥i/
2d	<i>shúht̥i</i>	/shé-Ø-uh-Ø-t̥i/	<i>shég̃huht̥i</i>	/shé-ghe-uh-Ø-t̥i/
3d	<i>shéhet̥i</i>	/shé-he-Ø-Ø-t̥i/	<i>shéheghet̥i</i>	/shé-he-ghe-Ø-Ø-t̥i/

When preceding a disjunct prefix as in *shé-* of *shénet̥i* ‘you are eating’, the underlying and surface forms match; however, if *ne-* is preceded by the conjunct prefix *ghe-*, as in *shég̃h̥t̥i* ‘you ate’, the underlying and surface forms are different due to the nasalization process.

<sup>11</sup>According to the hypothesis that local and nonlocal subjects are located in different positions of the verb template, the  $\emptyset$ - third person singular prefix is also assumed to occur to the left of the perfective prefix.

<sup>12</sup>According to Cook (personal communication) this generalization is not entirely accurate. It seems that some verbs with the *ɪ*- classifier can also occur with the *i*- first person singular marker: ex. *nilit̥i* ‘I bought it (game animal)’

In summary, pronominal prefixes are essential to all verb forms in Chipewyan.

According to Cook (forthcoming), these particular prefixes are treated as inflectional in all Athabaskan grammars. This inflectional status means that the lexical meaning of the verb is not altered, although, changes to the grammatical form may take place. That is the verbs *shésti* 'I am eating' and *shéneŋ* 'you are eating' both refer to the activity of eating; however, the former verb is in first person singular and the latter verb is in second person singular changing the grammatical form.

### 2.2.3 Primary Aspect and Mode Prefixes

One of the main focuses of this thesis is the analysis of the primary aspect and mode prefixes of Chipewyan, also referred to as conjugation markers, which are located in position 3 of the verbal template as given in (10).<sup>13</sup> Cook (forthcoming) notes that imperfective, perfective, and optative morphology are productive in that they can occur across the Chipewyan verb corpus. These prefixes are listed and exemplified in (19).

#### (19) Inflectional Aspect and Mode Prefixes

a.	Imperfective	1. Ø-	hesjen	/he-Ø-s-d-yen/	'I am singing'
		2. ne-	ts'enesthir	/ts'e-ne-s-thir/	'I am waking up'
		3. the-	thida	/the-i-da/	'I am in sitting position'
b.	Perfective	1. ghe-	shégheŋ	/shé-ghe-ŋ/	's/he ate'
		2. the-	nátheszé	/ná-the-s-ze/	'I hunted'
		3. ne-	níya	/ní-ne-ya/	's/he arrived'
c.	Optative	1. wa-	náwaszé	/ná-wa-s-zé/	'I should hunt'

A variety of prefixes marking aspect and mode are permitted in this position. There are three imperfective prefixes Ø-, *ne-*, and *the-* in (19a) and three perfective prefixes *ghe-*,

<sup>13</sup>Although the *ghe-* progressive also occurs in position 3, it will not be discussed in this thesis. An example of the *ghe-* progressive is *náyeghéŋígh* (\* /ná-ye-ghe-the-ŋ-nígh/) 's/he bought it'.

*the-*, and *ne-* in (19b) all of which are productive in the grammar. As the focal point of this thesis, these six prefixes are discussed in detail in chapter three. The only mode prefix in Chipewyan, the optative prefix *wa-*, is also a position 3 prefix in (10) and is briefly examined in chapter three as well. Typically, only one aspect/mode prefix can appear in this position for any given verb form.<sup>14</sup> In other words the imperfective, perfective and optative prefixes are mutually exclusive as conjugation markers. These aspect and mode prefixes are important to this thesis and are, therefore, deserving of attention. Further detail on each individual prefix is given in chapter three.

#### 2.2.4 Secondary Aspect and Thematic Prefixes

Position 4 of the Chipewyan verb includes three types of prefixes. Only two of these prefix categories will be elaborated in this section. The most commonly attested category includes *de-* and *ne-* which are thought to be vestiges of a Proto-Athabaskan gender system (Cook, forthcoming). The second group of prefixes in this position are often referred to as secondary aspect prefixes. According to Cook (1989, forthcoming), these prefixes mark aspectual notions such as inceptive, conative, and semelfactive. The third group from position 4, which is not discussed herein, involves a singular 'reflexive-benefactive' prefix, *de-*. The first two groups of prefixes are discussed below.

As noted the most common thematic prefixes are *de-* and *ne-* which commonly occur with verbs that are descriptive, or adjectival, in nature. Cook (forthcoming) observes that *de-* occurs in verbs that denote surface shape, texture, consistency and colour. In contrast, *ne-* typically occurs with verbs describing more abstract qualities; however,

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<sup>14</sup>A small number of verbs appear to occur with both the *ne-* and *ghe-* prefixes simultaneously. An example of this is *yeneghil̥q̥* [ye-ne-gh̥i-l̥-q̥] 'he looked at it'. At this time it is not clear whether both of these prefixes mark perfective aspect, or if this *ne-* prefix is a thematic prefix from position 4. Further investigation is necessary.

many exceptions to these generalizations exist. Examples of these *de-* and *ne-* thematic prefixes are provided in (20).

(20)	a. <i>delgai</i>	'it is white'	<i>delzēn</i>	'it is black'
	<i>degóth</i>	'it is new'	<i>detan</i>	'it is thick'
	b. <i>nezq</i>	'it is good'	<i>nechá</i>	'it is big'

In (20a) *delgai* 'it is white' and *delzēn* 'it is black' both refer to colour terms, and *detan* 'it is thick' refers to the consistency of an object. It is not clear how *degóth* 'it is new' is accommodated by Cook's definition. It is possible that the reference of 'new' refers to the physical condition of the object: in which case, the definition provided by Cook is acceptable. *Nezq* 'it is good' refers to an abstract quality and *nechá* 'it is big' refers to a physical quality where the latter verb is an exception to Cook's generalization.

In addition to these commonly found thematic prefixes, the prefix *ʔe-*, as in *ʔekēn* 'it is sweet', is present in conservative dialects; however, the *ʔe-* prefix is slowly being replaced by *the-* in many communities. This prefix belongs to the same natural class as *de-* and *ne-*.

The second category of position 4 prefixes are the secondary aspect prefixes. According to Cook (forthcoming), these prefixes contrast with the primary aspect prefixes based on their inflectional/derivational status. In comparison to the primary aspect/mode prefixes which are inflectional, the secondary aspect prefixes are derivational and are commonly labeled thematic prefixes in the Athabaskan literature (see Kari (1979), Rice (1989), Cook (1989), Cook (forthcoming)). In other words, secondary aspect prefixes mark lexical aspect which implies that these prefixes are specified by certain verbs in the lexicon. In contrast to the productive primary aspect/mode prefixes, secondary aspect prefixes are limited to small subcategories of verbs: they are not productive across the Chipewyan verb corpus. While primary aspect/mode morphology can occur with nearly



all verbs, secondary aspect prefixes cannot. Two of the common secondary aspect prefixes in Chipewyan are semelfactive and seriative, or iterative. Cook (forthcoming) explains that verbs which are inherently seriative (prolonged and repeated action) can occur with a semelfactive marker *é-* thereby changing the nature of the event. Consider the data in (21).

(21)	Example	Breakdown	Gloss
	Seriative		
a.	<i>neshúł</i>	/ne-ł-yúł/	'you are blowing it'
	Semelfactive		
b.	<i>híshúł</i>	/é-ne-ł-yúł/	'you are blowing it once'

The verb *neshúł* 'you are blowing it' in (21a) is the basic seriative verb form without any secondary aspect morphology. In (21b) *híshúł* 'you are blowing it once', the semelfactive *é-* prefix is added to the verb resulting in a semelfactive meaning. That the *é-* prefix is present is supported by a number of morphological observations. First, high tone from *é-* is present on the first syllable of *híshúł* 'you are blowing it once' which is not present in the basic form *neshúł* 'you are blowing it'. Also metathesis, epenthesis, and tensing have occurred in (21b), due to the addition of the *é-* prefix resulting in *híshúł* (/é-ne-shúł/ → /é-en-shúł/ → /ɛ-shúł/ → /híshúł/) and an interpretation where the activity of blowing occurs only once (blowing out a candle for example).

Overall, the prefixes which surface in position 4 are derivational prefixes implying that the addition of any of these prefixes lexically alters the meaning of the verb. The secondary aspect prefixes are restricted to specific groups of verbs. For example, the semelfactive *é-* prefix can only occur with seriative verbs.

## 2.2.5 Direct Object Prefixes

In contrast to the local and nonlocal subject prefixes, all direct objects are located in position 6 of the verb template from (10). The direct objects, as identified by Cook (forthcoming), are listed in (22).

(22)	Singular	Dual
1s	se-	nuhe-
2s	ne-	nuhe-
3s	Ø-/be- <sup>15</sup>	
4s	ye-	
0	?e-	
Reflexive	?ede-	
Reciprocal	?ete-	
Areal	ho-	

From the summary in (22) notice that one dual object prefix represents both first and second person dual forms. Chipewyan, like other Athabaskan languages, exhibits a fourth person: when a third person subject and a third person object are present in a sentence but are not co-indexed, the object is represented by a fourth person prefix (a distinct third person). An example of this phenomena is *yełtsi* 'he<sub>3</sub> makes it<sub>4</sub>' in (23a) where *ye-* represents the fourth person object and the third person subject is unmarked.

(23)	Verb	Breakdown	Gloss
a.	<i>yełtsi</i>	/ye-Ø-ł-tsi/	'he <sub>3</sub> is making it <sub>4</sub> '
b.	<i>hestsi</i>	/s-Ø-tsi/	'I am making it'
c.	<i>nets'esni</i>	/ne-ts'e-s-d-ni/	'I am helping you'
d.	<i>?ełt'ui</i>	/?e-Ø-ł-t'ui/	'he is sucking (something)'

Verbs from the Elford and Elford (in progress) in (23b-d) still require description. First, in (23b) *hestsi* 'I am making it' the third person object is unmarked and the first person subject is marked with *s-*. Second, the verb *nets'esni* 'I am helping you' in (23c) also illustrates the distinction between subject and object prefixes. The second person direct object prefix *ne-* appears word-initially and the first person subject prefix *s-* occurs

<sup>15</sup>The third person object (specified) is commonly unmarked in the overt morphology. In some constructions; however, *be-* occurs in place of zero. This alternate construction occurs most often in passive and seriative constructions. See Cook (forthcoming) for details.

between the prefix *ts'e-* and the stem *-ni* in position 2. Finally, in (23d) *ʔeʔt'ut* 'he is sucking something' exhibits an unmarked third person subject and *ʔe*, an impersonal third person object prefix. Cook (forthcoming) has a detailed discussion of the direct object prefixes in Chipewyan. For descriptions of the Athabaskan subject and object system in general, see Rice (1989), and Cook and Rice (1989).

Indirect objects are also marked in the Chipewyan verb. However, while direct object morphology is part of the verb template, the indirect morphology is part of the postposition morphology. These arguments require a postposition which obligatorily has person and number marking representing the indirect object. Consider the sentence in (24).

- (24)    *seba*                    *yeʔtʃi*  
          me(IDO)-for    4(O)-imp-1s-make  
          'He is making it for me'

In *seba yeʔtʃi* 'he is making it for me' of (24) the first person singular indirect object is *se-*, and is part of the postposition. This contrasts with the representation of the fourth person direct object *ye-* which is located in position 6 of the verb template.

## 2.2.6 Adverbial and Incorporated Elements

Positions 7 through 11 in the verbal template contain various derivational elements including incorporated nouns and postpositions. A list of adverbial elements also contained in these positions is provided in (25).

(25)	Prefix	Function	Position	Example	Gloss
a.	<i>na-</i>	iterative	8	<i>naghest'j</i>	'I saw him again'
b.	<i>dá-</i>	distributive <sup>16</sup>	9	<i>nádáthílzé</i>	'We (pl) hunted'
c.	<i>ní-</i>	to arrive at a point	10	<i>nínesda</i>	'I am returning'
d.	<i>ná-</i>	continuative	10	<i>nádhër</i>	'He is staying'

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<sup>16</sup>collective plural

*Na-* in (25a) and *dá-* in (25b) are the only prefixes which surface in positions 8 and 9, respectively. Position 10 can be filled by a variety of prefixes with adverbial functions. Despite their presence in Chipewyan and other Athabaskan languages (such as Navajo, c.f. Young and Morgan 1980), adverbials are not very well studied elements in the Athabaskan literature.

Nouns and postpositions can be incorporated into Chipewyan verbs which commonly occurs in languages that are highly agglutinating. Incorporation consists of the compounding of a noun or postposition and verb. Usually, the incorporated noun constitutes an argument of the verb, while the incorporated postposition can have a variety of grammatical functions in a transitive verb.

Incorporated nouns are located in position 7 and incorporated postpositions appear in position 11. Cook (forthcoming) describes an incorporated noun as a root often lacking prefixes or suffixes where the implied possessor of the noun and the subject of the clause are co-referential. Cook's examples are reproduced in (26).

(26) Imperfective			Perfective		
1s	<i>nalasde</i>	'I wash (my) hands'	1s	<i>nalaghesdé</i>	'I washed (my) hands'
2s	<i>nalalde</i>	'You wash (your) hands'	2s	<i>nalaghıldé</i>	'You washed (your) hands'
3s	<i>nalalde</i>	'He washes (his) hands'	3s	<i>nalaghelde</i>	'He washed (his) hands'

The noun *-la* 'hand' occurs in position 7 of the verb between the disjunct prefix *na-* and the perfective marker *ghe-* in the perfective forms above. In *nalaghesdé* 'I washed (my) hands' of (26), the possessor of *la* 'hand' and the first person singular subject of the clause are co-referential. Although rare, a fully inflected noun may also be incorporated into the verb. In these cases the possessor of the noun and the subject of the clause are not co-referential.

Inflected nouns can also be incorporated into a verb which Cook (p.c.) claims is the case in (27).

- (27) bekúęts'íya  
 be - kúę ts'én - héya  
 3-house towards-went  
 'He went home'

In *bekúęts'íya* 'he went home' of (27) *bekúę* 'his home' is an incorporated noun. which exhibits possessive morphology.

Incorporated postpositions result in complex verb forms in Chipewyan. Examples from Cook (p.c.) are provided below in (28).

- (28) a. béresdí  
 be - é - de - s - Ø - dí  
 3-against-adv-1s-CL-feel  
 'I feel it (by pressing against it)'
- b. tu basthi  
 tu . . . ba-s--Ø - dhi  
 water for-1-Cl- have desire  
 'I am thirsty'
- c. bër basthër  
 bër ba - s - Ø - dhër  
 water for-1-Cl- have desire  
 'I am hungry'

Two different types of postpositions are illustrated in (28). In (28a) *béresdí* 'I feel it' the postposition is inflected for third person with the pronominal prefix *be-*: i.e. the object of the postposition. In (28b-c) the object of the postposition is an uninflected noun. For example, *tu* 'water', of *tu basthi* 'I am thirsty', is a bare noun lacking any derivational or inflectional morphology.

The incorporated postposition originates from a postposition which was initially independent from the verb (Noun t<sub>i</sub> Position<sub>i</sub> Verb). Cook (forthcoming) finds evidence

for this analysis from conservative dialects which can optionally use *tu ba hesthi* 'I am thirsty' where epenthetic *he-* is possible between the postposition and the rest of the verb.

Incorporated elements are commonly found in Chipewyan verb forms and have been examined in other Athabaskan languages by linguists such as Sapir (1911), Mithun (1986), Baker (1988), and Wilhelm (1992).<sup>17</sup> However, complex verbs are not referred to in this analysis.

### 2.3 THE VERB AND LEVELS OF REPRESENTATION

The structure of the Athabaskan verb acknowledges three levels of representation which are generally defined in Sapir and Hoijer (1967:85):

A verb form is analyzed in three steps (1) the base is separated from the inflectional prefixes, (2) the base is divided into its adverbial prefixes, if any, and its theme, and (3) the theme is divided into its thematic prefixes, if any, and its stem.

Cook (1984) among others, propose that the stem is comprised of an abstract verb root and suffixes denoting aspectual properties. These three levels of representation are summarized in (29).

- (29)    Stem        {verb root + (suffix)}  
          Theme     {(derivational prefixes) + stem}  
          Base        {(adverbial prefixes) + theme}

The paragraphs below briefly outline the general properties of the verb stem, the theme and the base, discussing some problematic issues as well.

The verb stem is easily identified within the Athabaskan verb. As mentioned above, many researchers, including Li (1946), Leer (1979), Kari (1979), and Cook (1984), propose that the stem consists of a root plus a suffix. The stem suffixes mark aspect (primary and secondary) and mode categories and are commonly referred to as stem

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<sup>17</sup>See Wilhelm (1992) for a detailed discussion of the syntax of incorporation in the Athabaskan languages.

alternation or stem variation.<sup>18</sup> Leer (1979) reconstructs Proto-Athabaskan (PA) verb stem variation and he lists a number of morphophonemic rules which operate in the PA stem variation. In general, he proposes three variants of obstruent-closed stem variation which serve to lengthen the vowel of the stem or to add either a fricative or an obstruent suffix to the stem. These morphological alternations signal differences in aspect and mode.

Cook (1977:260) observes related alternations in the daughter languages Sarcee, Chilcotin, and Central Carrier. His primary focus is stem alternation by syllable weight which is related to the voicing of the stem-final obstruent. He illustrates such distinctions in Sarcee with the data in (30).

(30)	Imperfective Stem	Perfective Stem	Gloss
a.	-lús	-lúz	'to sew'
b.	-yúc	-yùj	'to whisper'
c.	-ʔòł	-ʔòl	'to chew'

The stem set *-lús/-lúz* 'to sew' illustrates a voicing distinction in the stem final position. Cook argues that this voicing distinction represents a difference in syllable weight where voiced segments are heavy and unvoiced segments are light. The same distinction is evident in the stems sets *-yúc/-yùj* 'to whisper' of (30b) and *-ʔòł/-ʔòl* 'to chew' of (30c).<sup>19</sup>

Chipewyan does not productively exhibit a voicing distinction like that in Sarcee which is much like that in Proto-Athabaskan (PA). In fact, much of the regularity of Leer's (1979) PA stem variation has been lost in Chipewyan. Li (1946) was the first to discuss stem

<sup>18</sup>Stem variation is not included in the present analysis due to its complex nature. Further research on these variations is necessary prior to their investigation in relation to situation aspect.

<sup>19</sup>Li (1946) refers to light syllables as CVC<sub>1</sub> and he refers to heavy syllables as CVC<sub>2</sub>, where C<sub>1</sub> is unvoiced and C<sub>2</sub> is voiced.

alternation in Chipewyan. A summary of Li's analysis of verb stem alternation for Chipewyan is provided in (31)

(31) Li's Stem Alternations (1946:6)

a. Invariable Stems:	-bá, -bá, -bá	'to go to war'
b. Vocalic Alternations:	-tɬ'í, -tɬ'á, -tɬ'ǣ	'to clean'
c. Tonal Alternations:	-de, -dé, -de	'to clean, wash'
d. Alternation of Syllabic Types:	-ní, níy, ní	'to buy'
	-ba, -bágh, -ba	'to go to war'

Li suggests four common stem alternation patterns. First, some verb stems exhibit no stem variation as in *-bá* 'to go to war'. Second, the vowel quality within a verb stem can change. For example, in the verb 'to clean' the stem vowel is /í/ in the imperfective aspect, but is /ǣ/ with both the perfective aspect and the optative mode. Third the tone of the stem can alternate as illustrated in *-de, -dé, -de* 'to clean, wash' of (31c). Fourth, verb stems can change from light to heavy syllables based on the aspect or mode expressed. Both the imperfective and optative verb stems *-ní, -ní* 'to buy' are light syllables implying they have an empty coda position. In contrast, the perfective stem *-níy* has a consonant filling the coda position. Although it has been demonstrated that the root is the true basic constituent of the verb, the verb stem is the term traditionally used in the literature (Cook, 1984) and is used herein.

The verb theme is the second level of representation. This constituent includes the verb stem, a classifier, and any thematic elements a particular verb may require.<sup>20</sup> The theme is considered to be the lexical entry of the verb and is widely referenced by Li (1946), Kari (1979), Cook (1984), Rice (1989). In (32) a number of Chipewyan themes are identified.

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<sup>20</sup>An unresolved issue with the verb theme is the representational status of the classifier. Sapir and Hoijer (1967) propose that the classifier is part of the verb base in contrast to the majority of linguists, such as Young and Morgan (1980), who consider the classifier to belong to the verb theme. The latter claim is the assumption made in this thesis.



(32) Theme	Gloss
a. <b>ya#...ł-ti</b>	'to talk, pray'
b. <b>na#...Ø-dhër</b>	'to stay'
c. <b>ts' é-...Ø-ni</b>	'to help it'
d. <b>ná#...Ø-dlógh</b>	'to laugh'
e. <b>shé#...Ø-ti</b>	'to eat'
f. <b>ts' é#...l-t'úi</b>	'to smoke'

The themes include any derivational material which is always present with the root/stem under a particular meaning. For example, the theme /**ya#...ł-ti**/ 'to talk, pray' always occurs with the *ya-* prefix, the *ł-* classifier, and *-ti* as the verb stem. Rice and Cook (1989:29) use the Slave examples in (33) to illustrate how the prefixes of a particular theme must occur in every verb derived from that theme.

(33) Verb	Gloss
a. <b>yahti</b>	'to talk, pray'
b. <b>séníya?ehtí</b>	'to judge'
c. <b>naya?ehtí</b>	'to meet, discuss'
d. <b>kaya?ehtí</b>	'to interpret'

In each of the verbs in (33), the portions which are members of the theme are in bold. These include *ya-*, the thematic prefix, the *h-* classifier, and the stem *-ti* in Slave.

The base is the third level of representation in the Chipewyan verb. This level includes everything but inflectional information. In the base, materials such as adverbial elements and incorporated postpositions are added to the verb. Examples of bases are given in (34).

(34) Verb Base	Gloss
a. /tu ba#Ø-thi/	'I am thirsty'
b. /be-é#re-Ø-dí/	'I feel it'
c. /ní-Ø-da/	'I am returning'
Note: Ø represents the zero classifier	

Cook (1984) points out that the status of the base is considerably less formal than that of the theme. Syntactically, the base would not form a constituent in comparison to the

theme which is an independent unit within the verb phrase. However, for some verbs the adverbial and incorporated elements are necessary for the particular meaning of a verb. Despite a lack of formalism present with the theme and the root, the base is still considered a legitimate level of representation for the purposes of this thesis.

## 2.4 CONCLUSION

This introduction to the phonological and morphological structure of the Chipewyan verb should serve as preparation for further discussion of the data presented in this thesis. See Li (1946) and Cook (forthcoming) for more detailed outlines of Chipewyan grammar. For a general introduction to the Athabaskan language family see Cook and Rice (1989).

## CHAPTER 3

### CHYPEWYAN ASPECT PREFIXES

While motivating an understanding of the morphosemantic distribution of the aspect prefixes in Chipewyan, this chapter also defines the terms *aspect* and *mode* as they are commonly viewed crosslinguistically, and identifies the individual aspect and mode prefixes in Chipewyan. First in section 3.1, the terms *aspect* and *mode* are defined from a crosslinguistic perspective as they are viewed by Comrie (1976) and Bybee (1985). Section 3.2 defines imperfective and perfective aspect in Chipewyan in relation to the crosslinguistic perspective of aspect which is followed by outlining the distinguishing morphophonological and semantic characteristics of each imperfective and perfective prefix in Chipewyan in section 3.3. Section 3.4 briefly remarks on the surface realizations and function of the optative mode in Chipewyan. Section 3.5 examines the contrasting distributions of the imperfective and perfective aspect prefixes and the optative mode prefix. The results of this distribution are twofold: (1) each of the imperfective and perfective aspect prefixes in Chipewyan is mutually exclusive while the *wa-* optative is unrestricted in its application, (2) the mutual exclusivity of the aspect prefixes results in five set conjugation patterns which each include one imperfective prefix and one perfective prefix. Section 3.5 also argues that the distribution of the conjugation patterns in Chipewyan is based on the inherent aspectual properties related to the situation structure of each verb. It is important to distinguish between the verb and its situation structure. While both are essential to the present discussion, they refer to different concepts. The term *verb* is used below to refer to the actual morphological form of the verb. *Situation* is used as a cover term for states, events, or processes which is related to the inherent aspectual

properties of each verb. The notion of *situation* is discussed throughout the analysis and is explicitly examined in chapters four and five.

### 3.1 ASPECT AND MODE

The use of the terms *aspect* and *mode* in the Athabaskan literature departs from the general usage of these same terms. According to Sapir and Hoijer (1967) and Kari (1979), the term *aspect* refers to derivational, or secondary, aspect prefixes. In contrast, Li (1946) uses the term *mode* to refer to the concepts above. Sapir and Hoijer (1967) and Kari (1979) identify imperfective, perfective, and optative prefixes as *modes*, while Li (1946) uses the label *aspect* to refer to these concepts. In order to avoid the problems these terminological differences might produce, a more common reference to the terms *aspect* and *mode* is used in the present discussion. This section identifies and defines the terms *aspect* and *mode* as they are commonly used in the non-Athabaskan literature, such as Comrie (1976) and Bybee (1985).

#### 3.1.1 Aspect

Comrie's (1976) discussion of non-lexical aspect primarily focuses on the distinction between perfective and imperfective in a variety of languages, including English, French, and Arabic, and is, therefore, convenient for the purpose of studying Chipewyan; a language which overtly contrasts imperfective and perfective aspect in the verbal morphology. Comrie observes that perfective aspect takes a situation as a whole looking at the outside of a situation without being concerned with its internal structure. In contrast, imperfective aspect focuses on the internal situation. Hence, the imperfective aspect can "look back to the start, look forward to the end, or [look] through all time (no beginning or end)" (p.4). This distinction is evident in the two sentences below.

- (1)
  - a. he was reading (imperfective)
  - b. he read (perfective)

The sentence *he was reading* in (1a) is considered imperfective because it refers to the internal structure of the situation. That is, the imperfective reading of (1a) refers the activity of reading as it is in the process of happening: it refers to the actual process of reading each page of a book, for example, rather than focusing on the activity of reading as a whole unit. The sentence *he read* in (1b) demonstrates the use of the perfective. This sentence is referring to the activity of reading as a whole where the internal structure is assumed to have taken place but is not the focus.

Aspectual realizations can be syntactic (analytic) or morphological (synthetic). Comrie (1976) suggests that the Progressive in French as in (2) is a syntactic realization of aspect.

- (2) je suis en train de travailler  
       'I am in (the) process of working'

In syntactic realizations the use of periphrastic constructions as in (2) is quite common. The other type of realization of aspect is through the morphology.

### 3.1.2 Mode

In contrast to aspect, Bybee (1985:22) proposes that mode distinctions express what the speaker wants to do with the proposition in the particular discourse.<sup>1</sup> That is, mode is a 'marker on the verb that signals how the speaker chooses to put the proposition into the discourse context'. This particular definition distinguishes mode from aspect defining the optative mode as indicating the speaker's wishes or wants regarding a proposition. The optative mode is the only mode present in position 3 of the Chipewyan verb. Bybee postulates that modes such as optative have scope over the entire sentence in contrast to aspects which only have scope over the verb or verb phrase at best.

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<sup>1</sup>Bybee (1985) uses the words *mood* and *mode* to refer to the same concept. Further Palmer (1986) expresses that a *mode* is realized as part of the verbal morphology while *moods* are realized periphrastically. In this thesis, only the term *mode* is used. This usage corresponds with Palmer's distinction because *mode* is realized in the Chipewyan verbal morphology. Furthermore, it better corresponds with the common Athabaskan reference to *mode*.

A number of realizations of mode are possible in the world's languages. Bybee discusses six of these possibilities for the optative mode. One such possibility is a trait among native languages of North America, such as Nahuatl, where special person/number forms are present to indicate the optative mode. Even more widespread is the use of an unmarked verb form which Bybee observes happens in Basque, Pawnee, and Tarascan, among others. Another manner in which to represent modes such as the optative in a language is by adding a prefix marking optative; however, this only occurs in languages where prefixing is common in the inflectional morphology.

### 3.1.3 Aspect and Mode Compared

According to Bybee (1985), aspect and mode contrast in two ways involving the notions of *relevance* and *lexical generality*. First, *relevance* implies that a category is relevant to a verb to the extent that the meaning of the category directly affects the lexical content of the verb stem. Since aspect "represents different ways of viewing the internal temporal constituency of an action or state" (Comrie 1976:3), aspect is highly relevant for verbs. That is, aspect is relevant to the verb because it directly affects or modifies the content of the verb. In relation to *lexical generality* a category must be applicable to all stems of the appropriate semantic and syntactic category, and in order for a morphological process to be so general it must have minimal semantic content. Because aspect is highly relevant to the verb it cannot have minimal semantic content. Further, Chipewyan imperfective and perfective aspects, as will be demonstrated below, are not applicable to all stems of the appropriate semantic content but are applicable to all stem of the appropriate syntactic category. In contrast, mode modifies the sentence which makes it less relevant to the verb than aspect. Moreover, because mode is less relevant it has less semantic content, and is more likely to have a flexible interpretation in relation to the verb.

### 3.2 ASPECT IN CHIPEWYAN

According to Cook (forthcoming) the Chipewyan perfective aspect marks the completion of a situation whereas the imperfective in Chipewyan typically marks the incompleteness of a situation. Comrie observes that the distinction between incomplete/completed is a common characterization of the difference between imperfective and perfective aspect but claims that a characterization such as Cook (forthcoming) is not entirely accurate:

The use of ‘completed’, however, puts too much emphasis on the termination of the situation, whereas the use of the perfective puts no more emphasis, necessarily, on the end of the situation than on any other part of the situation, rather all parts of the situation are presented as a single whole.  
(Comrie, 1984: 18)

That is, perfective aspect refers to all of the parts of a situation as a single unit inferring the completion of a situation but not focusing on the termination of that situation. In contrast, imperfective aspect refers to the parts of a situation separately which implies the incompleteness of the event.

Cook (forthcoming) provides the following example to illustrate perfective aspect.

- (3) Alfredaze xēł bekué hółtsi (c.f. ho-the-ł-tsi)  
 Alfred-dim. with 3-home areal-3s-perf-cl-made (it)  
 lit: ‘she made her home with Alfredie’  
 ‘She married little Alfred’

The perfective prefix *hółtsi* ‘I made it’ in (3) uses the *the-* perfective. Putting details aside, the *the-* perfective (c.f. ho-the-ł-tsi) in *hółtsi* is the perfective prefix required for the use of the verb stem *-tsi* ‘to make it’. The use of the *the-* perfective implies that *bekué hółtsi* ‘she married him’ is referring to all parts of the situation as a whole without addressing any individual portion of that situation.





Moreover, lists of verbs which appear with each aspect prefix are provided below. These lists are not exhaustive: it is being assumed that the generalizations made below apply to the general Chipewyan verb corpus.

### 3.3.1 Imperfective Aspect

#### 3.3.1.1 Ø- imperfective

The most widespread imperfective marker in Chipewyan is the Ø- imperfective. This prefix is phonologically null where prefix position 3 is then empty. (5) illustrates a variety of verbs from Elford and Elford (in progress) which exhibit the Ø- imperfective prefix. All of the verbs in (5) occur in first person *s*-; however, a variety of other prefixes are also present; all of which were described in chapter two. Because there are three null prefixes each is marked with a subscript number indicating the position of the verb in which it is located: Ø<sub>2</sub> is the Ø classifier, Ø<sub>3</sub> is Ø- imperfective aspect, and Ø<sub>5</sub> is the third person subject marker Ø-. Finally, the stem is the last constituent in each verb.

(5)	Verb	Underlying Form	Gloss
a.	hesjĕn	/Ø <sub>3</sub> -s-d-jĕn/	'I am singing'
b.	yasti	/ya-Ø <sub>3</sub> -s-ĭ-ti/	'I am talking'
c.	hestsagh	/Ø <sub>3</sub> -s-Ø <sub>2</sub> -tsagh/	'I am crying'
d.	shéstĭ	/shé-Ø <sub>3</sub> -s-Ø <sub>2</sub> -tĭ/	'I am eating'
e.	hust'áth	/hu-Ø <sub>3</sub> -s-Ø <sub>2</sub> -t'áth/	'I am cutting it repeatedly (with a blade)'
f.	heshúĭ	/Ø <sub>3</sub> -s-Ø <sub>2</sub> -shúĭ/	'I am blowing it prolonged'
g.	násdlógh	/ná-Ø <sub>3</sub> -s-d-lógh/	'I am laughing'
h.	náskui	/ná-Ø <sub>3</sub> -s-l-kui/	'I am vomiting'
i.	hesbĕs	/Ø <sub>3</sub> -s-ĭ-bĕs/	'I am boiling it' <sup>2</sup>
j.	nászé	/ná-Ø <sub>3</sub> -s-l-zé/	'I am hunting'
k.	hestsi	/Ø <sub>3</sub> -s-ĭ-tsi/	'I am making it'
l.	hest'áth	/Ø <sub>3</sub> -s-Ø <sub>2</sub> -t'áth/	'I am cutting it once'
m.	heshúĭ	/é-Ø <sub>3</sub> -s-Ø <sub>2</sub> -shúĭ/	'I am blowing it once'
n.	neszq	/ne-Ø <sub>3</sub> -s-Ø <sub>2</sub> -zq/	'It is good'
o.	delgai	/Ø <sub>5</sub> -de-Ø <sub>3</sub> -l-gai/	'it is white'

From (5) it is apparent that the Ø- imperfective can occur with verbs that have a large variety of semantic characteristics. Also, the Ø- imperfective occurs with both active and stative verbs in Chipewyan where active verbs, such as *hesjĕn* 'I am singing' from (5a) and *hestagh* 'I am crying' in (5c), and stative verbs, such as *neszq* 'I am good' from (5n) are included. Some verbs, such as *hesjĕn* 'I am singing', imply activities which occur over a period of time and do not identify a specific endpoint. That is, it is implied that the activity of singing carries on over an arbitrary period of time. Other verbs like *hesbĕs* 'I am boiling it' in (5i) occur over a period of time, as with the former verbs, but they demonstrate an inherent endpoint: *hesbĕs* is terminated when the boiling point has been reached. Further, the stative verbs using with the Ø- imperfective are descriptive, or adjectival, in nature as in (5o) *delgai* 'it is white'.

<sup>2</sup>The verb form *hesbĕs* 'I am boiling it' likely refers to an object being boiled rather than referring to the water achieving the boiling point.

A paradigm for the stem *d-yēn* 'sing' which occurs with the  $\emptyset$ - imperfective is provided in (6).  $\emptyset_3$  represent the null imperfective marker.

(6) *d-yēn* 'to sing'

b. Person/ Number	Imperfective	
1s	hesjēn	/ $\emptyset_3$ -s-d-yēn/
2s	nejēn	/ $\emptyset_3$ -ne-d-yēn/
3s	hejēn	/ $\emptyset_5$ - $\emptyset_3$ -d-yēn/
1d	hījēn	/ $\emptyset_3$ -íd-d-yēn/
2d	huhjēn	/ $\emptyset_3$ -uh-d-yēn/
3d	hehejēn	/he- $\emptyset_3$ -d-yēn/

In (6), the  $\emptyset$ - imperfective prefix precedes all local subjects as in *hesjēn* / $\emptyset_3$ -s-d-yēn/ where  $\emptyset_3$  occurs to the left of the first person prefix *s-*. In the 3s and 3d forms,  $\emptyset_3$  is closer to the stem than  $\emptyset_5$ , the unmarked third person singular prefix, and *he-* the third person dual prefix.<sup>3</sup>

### 3.3.1.2 *ne-* imperfective

The imperfective prefix occurs with a select group of verbs in Chipewyan. According to Cook (forthcoming) verbs with the *ne-* imperfective in Chipewyan commonly depict a momentary situation meaning they occur in an instant.<sup>4</sup> Further, all of the verbs occurring with the *ne-* imperfective are active. A list of verbs taken from Elford and Elford (in progress) exhibiting this prefix are illustrated in (7).

<sup>3</sup>That the unmarked third person subject prefix is located in position 5 is difficult to prove. Because the third person duoplural marker is located in position 5, and singular and duoplural forms of the first and second person subjects are located in one position rather than two, it is assumed that the third person singular prefix is located in the same position and its duoplural counterpart.

<sup>4</sup>Kari (1979) and Rice (1989) suggest that the *ne-* imperfective appears with verbs of motion in Ahtna and Slave, respectively.

(7)	Verb	Underlying Form	Gloss
a.	nínesa /nísa	/ní#ne-s-Ø <sub>2</sub> -gha/	'I am arriving'
b.	nínesda / nísda	/ní#ne-s-d-ja/	'I am returning'
c.	nestí	/ne-s-Ø <sub>2</sub> -tí/	'I am going to bed'
e.	yodárénesdëth	/yo-dá-de-ne-s-d-dëth/	'I am locking it (with a key)'
f.	nínínest'á	/ní#ní#ne-s-d-?á/	'I am bowing'
g.	ts'eneshti	/ts'e#ne-s-Ø <sub>2</sub> -thi/	'I am waking up'
h.	nesdá	/ne-s-d-ja/	'I am sitting down'
i.	ełk'enesle	/ełk'e-ne-s-Ø <sub>2</sub> -le/	'I am opening (a book)'

In order to understand Cook's concept of momentary, momentary verbs can be contrasted with certain types of stative verbs. Consider the verb *nesdá* 'I am sitting down' from (7h). A corresponding *the-* imperfective stative verb, *thida* 'I am in sitting position' which is discussed in section 3.3.1.3, is also present in Chipewyan. *Nesdá* 'I am sitting down' refers to the action of sitting down which begins from a standing position and is immediately terminated when the position of sitting has been reached. In contrast, *thida* 'I am in sitting position' is stative and refers to the state of being in the sitting position. The former activity occurs in an instant, whereas, the latter verb is a state.

A paradigm illustrating the *ne-* imperfective is given in (8).

(8) Ø-tí 'to sleep (go to bed)'		
b. Person/ Number	Perfective	
1s	nestí	/ne-s-Ø <sub>2</sub> -tí/
2s	nítí	/ne-ne-Ø <sub>2</sub> -tí/
3s	netí	/ne-Ø <sub>5</sub> -Ø <sub>2</sub> -tí/
1d	nítes	/ne-íd-Ø <sub>2</sub> -tes/
2d	nuhtes	/ne-uh-Ø <sub>2</sub> -tes/
3d	henetes	/ne-he-Ø <sub>2</sub> -tes/

As illustrated in (8) the *ne-* imperfective prefix precedes all local subjects as in *nestí* /ne-s-Ø<sub>2</sub>-tí/ where *ne-* occurs to the left of the first person prefix *s-*. In the 3s and 3d forms, the *ne-* imperfective is closer to the stem than Ø<sub>5</sub>, the unmarked third person singular prefix, and *he-* the third person dual prefix.

### 3.3.1.3 *the-* imperfective

A third imperfective prefix available in Chipewyan is the *the-* imperfective. Verbs which occur with this prefix are given in (9) from Elford and Elford (in progress). Note that the first person *i-* prefix is used in these verbs, and is discussed below.

(9)	Verb	Underlying Form	Gloss
a.	thiṭi	/the-i-Ø <sub>2</sub> -ṭi/	'I am in sleeping position (lying down)'
b.	thiʔa	/the-i-Ø <sub>2</sub> -ʔa/	'I am there'
c.	thiyi	/the-i-Ø <sub>2</sub> -yi/	'I am in standing position'
d.	thida	/the-i-Ø <sub>2</sub> -da/	'I am in sitting position'
e.	k'athida	/k'a#the-i-Ø <sub>2</sub> -da/	'I sit and wait' <sup>5</sup>
f.	thek'á	/Ø <sub>5</sub> -the-Ø <sub>2</sub> -k'á/	'it is cold'

All of the verbs in (9) are stative; however, despite the morphological uniformity of the *the-* imperfective, further division within this class of verbs is not a simple task. Moreover, this class of verbs is small which prohibits a complete analysis of the phenomenon. Some verbs such as *thek'á* 'it is cold' in (9f) describe states whereas other verbs identify positional status as in *thida* 'I am in sitting position' in (9d) or *thiṭi* 'I am in sleeping position (lying down)' in (9a). Attempts have been made to classify these neuter verbs (see Kari 1979, Rice 1989): however, these analyses are difficult to translate into a general linguistic framework. At this time, it is suggested that the *the-* imperfective is required by verbs which describe states or positions.<sup>6</sup>

A paradigm illustrating the *the-* imperfective is provided in (10). Note that the paradigm in (10) illustrates a verb stem that alternates based on the singular/dual distinction where *-da* is used for singular forms and *-ke* is used in dual forms.

<sup>5</sup>It is likely that this gloss is not entirely accurate; however, my consultants assure me that this verb is stative.

<sup>6</sup>It is possible that (9f) *thek'á* 'it is cold' should be treated as an exception, although a more thorough search for such verbs in Chipewyan is required before this can be viewed as such.

## (10) Ø-da(sg)/ke (pl) 'to be seated'

b. Person/ Number		Imperfective
1s	thida	/the-i-Ø <sub>2</sub> -da/
2s	thida	/the-ne-Ø <sub>2</sub> -da/
3s	theda	/Ø <sub>5</sub> -the-Ø <sub>2</sub> -da/
1d	thike	/the-íd-Ø <sub>2</sub> -ke/
2d	thuhke	/the-uh-Ø <sub>2</sub> -ke/
3d	héke	/he-the-Ø <sub>2</sub> -ke/

Although it is suggested that the *the*- imperfective is located in position 3 of the verb, it is difficult to support this claim with appropriate data because it often occurs in word initial position. As illustrated in (10), the *the*- imperfective occurs to the left, or precedes, all local subjects as in *thida* 'I am in sitting position'. By examining the underlying structure of the 3d form in (10), it appears that the *the*- imperfective occurs to the right of the 3d prefix *he*- suggesting that the *the*- imperfective is in either position 3 or 4 of the verb.

Two phonological phenomena occur in (10) as well: one concerns the first person singular prefix, and the other involves the surface realization of the *the*- imperfective. Recall from chapter 2, section 2.2.2 that the first person singular *i*- occurs with the perfective paradigms of verbs which have a Ø- or *ɪ* classifier. This alternative first person marker occurs in the 1s form *thida* 'I am in sitting position' in the *the*- imperfective paradigm given in (10).<sup>7</sup> Second, notice that the 3d form *héke* 'they are in sitting position' does not have the *the*- imperfective appearing in the surface form. The *the*- imperfective prefix is deleted in third person forms and high tone is imparted on the preceding syllable. In the 3s form *theda* 'he is in sitting position' the requirement that a verb have a minimum of two syllables supersedes the rule which deletes the *the*- imperfective and, therefore, *the*- remains in the surface form.

<sup>7</sup>The status of the *the*- imperfective as a prefix entirely independent of the *the*- perfective (discussed in section 3.4.2.2) is questionable. This is primarily due to the homophony exhibited between these two prefixes. Also, the appearance of the *i*- first person singular marker suggests that these two prefixes might be related. The status of the *the*- imperfective prefix is not resolved in this thesis.

### 3.3.2 Perfective Aspect

As witnessed by Li (1946) and Cook (1996, forthcoming) Chipewyan verbs employ three perfective prefixes; *ghe-*, *the-*, and *ne-* where *ghe-* is used most often and *ne-* is the least commonly found. Each of the perfective prefixes are discussed in terms of their morphophonological and semantic characteristics and distributions. This section identifies each perfective prefix and discusses its individual properties.

#### 3.3.2.1 *ghe-* perfective

The *ghe-* perfective is the most commonly found perfective aspect marker for both active and stative verbs in Chipewyan. In relation to the other two perfective prefixes, the *ghe-* perfective is the most transparent in its surface realization. This perfective prefix occurs with a portion of the active verb stems which use the  $\emptyset$ - imperfective, and occurs with all of the stative verbs which use the *the-* imperfective. A list of these verbs found in Elford and Elford (in progress) is given in (11). Only underlying forms for the perfective forms are provided in (11) where the only difference between the imperfective and perfective forms of each verb is the  $\emptyset$ - imperfective and the *ghe-* perfective in position 3.<sup>8</sup>

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<sup>8</sup>The English glosses of the perfective forms in (11) appear to be tense distinctions rather than aspect distinctions. This is not the case. The translations are affected by the fact that English has a more obvious tense distinction.

(11)	Imperfective	Gloss	Perfective	Underlying Form	Gloss
a.	hesjën	'I am singing'	ghesjën	/ghe-i-d-yën/	'I sang'
b.	yałti	'I am talking, praying'	yaghiłti	/ya#ghe-i-ł-ti/	'I talked, prayed'
c.	hestsagh	'I am crying'	ghitsagh	/ghe-i-Ø <sub>2</sub> -tsagh/	'I cried'
d.	shéstı	'I am eating'	shégheı	/shé#ghe-i-Ø <sub>2</sub> -tı/	'I ate'
e.	hust'áth	'I am cutting it repeatedly'	ghit'áth	/ghe-i-Ø <sub>2</sub> -t'áth/	'I cut it repeatedly'
f.	hesshúl	'I am blowing it prolonged'	ghishúl	/ghe-i-Ø <sub>2</sub> -shúl/	'I blew it prolonged'
g.	thida	'I am in sitting position'	ghidá	/ghe-i-Ø <sub>2</sub> -dá/	'I was in sitting position'
h.	thıı	'I am in sleeping position'	ghıı	/ghe-i-Ø <sub>2</sub> -tı/	'I was in sleeping position'

The verbs in (11a-f), such as *yaghiłti* 'he talked, prayed' and *ghesjën* 'I sang', are active verbs which occur over a period of time and do not have an inherent endpoint. Stative verbs also occur with the *ghe-* perfective. These are listed in (11g-h) where *ghıı* 'I was in sleeping position' implies that the first person singular was previously in sleeping position and is no longer in such a state.

A typical paradigm exhibiting the *ghe-* perfective is given in (12).

(12)	Ø-tsagh 'to cry'
b.	Person/ Perfective Number
1s	ghitsagh /ghe-i-Ø <sub>2</sub> -tsagh/
2s	ghıtsagh /ghe-ne-Ø <sub>2</sub> -tsagh/
3s	ghıtsagh /Ø <sub>5</sub> -ghe-(N)-Ø <sub>2</sub> -tsagh/ <sup>9</sup>
1d	ghıtsagh /ghe-ıd-Ø <sub>2</sub> -tsagh/
2d	ghuhtsagh /ghe-uh-Ø <sub>2</sub> -tsagh/
3d	heghıtsagh /he-ghe-(N)-Ø <sub>2</sub> -tsagh/

As illustrated in (12), the *ghe-* perfective occurs to the left of all local subjects as in *ghitsagh* 'I cried'. The 3d form *heghıtsagh* 'they cried' in (12), demonstrates that the *ghe-* perfective occurs to the right of the 3d prefix *he-* suggesting that the *ghe-* imperfective is in

<sup>9</sup>Recall that the nasalization on the vowels in the 3 and 32 forms is the surface realization of the N-perfective. This nasalization is present only on verbs which occur with either a Ø- or ł- classifier and the *ghe-* perfective prefix.



either position 3 or 4 of the verb. On a morphological level, the first person prefix is *i-* which has been suggested to occur with all perfective verbs which occur with a  $\emptyset$ - or *t-* classifier.<sup>10</sup>

The same distributional and morphophonological phenomena which occur with active verbs in the *ghe-* perfective apply to stative verbs as in (13).

(13)  $\emptyset$ -da/ke 'to be in sitting position'

Person/ Number		Imperfective		Perfective
1s	thida	/the-i- $\emptyset_2$ -da/	ghidá	/ghe-i- $\emptyset_2$ -dá/
2s	thjda	/the-ne- $\emptyset_2$ -da/	ghjda	/ghe-ne- $\emptyset_2$ -dá/
3s	theda	/ $\emptyset_5$ -the- $\emptyset_2$ -da/	ghjda	/ $\emptyset_5$ -ghe-(N)- $\emptyset_2$ -dá/
1d	thíke	/the-íd- $\emptyset_2$ -ke/	ghíké	/ghe-íd- $\emptyset_2$ -ké/
2d	thuhke	/the-uh- $\emptyset_2$ -ke/	ghuhké	/ghe-uh- $\emptyset_2$ -ké/
3d	heke	/he-the- $\emptyset_2$ -ke/	heghíké	/he-ghe-(N)- $\emptyset_2$ -ké/

The paradigm in (13) also has the *ghe-* perfective prefix occurring to the left of the local prefixes, and to the right of the nonlocal prefixes. Moreover, the first person singular *i-* is present in both the *the-* imperfective *thida* 'I am in sitting position' and *ghe-* perfective *ghida* 'I was in sitting position' of this verb stem.

### 3.3.2.2 *the-* perfective

Another Chipewyan perfective prefix is the *the-* perfective. In the previous section, it was noted that a portion of the verbs occurring with the  $\emptyset$ - imperfective occur with the *ghe-* perfective; however, not all of the  $\emptyset$ - imperfective verbs were included. Verbs using the *the-* perfective commonly occur with another portion of the verbs which use the  $\emptyset$ - imperfective. A sample of these verbs taken from Elford and Elford (in progress) are given in (14).

<sup>10</sup>Recall that the *i-* first person plural also occurs with the *the-* imperfective.

(14)	Imperfective	Gloss	Perfective	Underlying Form	Gloss
a.	náskui	'I am vomiting'	nátheskui	/ná#the-s-l-kui/	'I vomited'
b.	hesbēs	'I am boiling it'	thiṭbēs	/the-i-ṭ-bēs/	'I boiled it'
c.	nászé	'I am hunting'	nátheszé	/ná#the-s-l-zé/	'I hunted'
d.	hést'ath	'I am cutting it with a blade'	thit'áth	/the-i-Ø <sub>2</sub> -t'áth/	'I cut it with a blade'
e.	hésshút	'I am blowing it once'	thishút	/the-i-Ø <sub>2</sub> -shút/	'I blew it once'

The verbs in (14a-c), such as *thiṭbēs* 'I boiled it', are active verbs which occur over a period of time and have an inherent endpoint. Semelfactive verbs, those verbs which consist of a single act or event, also occur with the *the-* perfective. These are listed in (14d-e) where *thit'áth* 'I cut it with a blade', for example, implies that the gun was shot only once.

The surface realization of the *the-* perfective is complicated by a variety of phonological rules. Multiple surface forms result because the *the-* perfective has a disjunct form distinct from its conjunct form. These differing forms are further altered in the third person forms. First, if the *the-* perfective prefix has a conjunct prefix to its left, *the-* is deleted. However, when a third person subject is present and a conjunct prefix is located to the left of the position 3 (where the imperfective and perfective prefixes are located), the *the-* perfective prefix is deleted and high tone is added to the preceding vowel. When a disjunct prefix occurs to the left of the *the-* perfective its form is not altered. Two of these phonological complications are found in the paradigm in (15).

(15) *ṭ-dá* 'to mend'

b.	Person/ Number	Perfective	
	1s	nánathiṭdā	/ná-na#the-i-ṭ-dā/
	2s	nánathuṭdā	/ná-na#the-ne-ṭ-dā/
	3s	nánayéṭdā	/ná-na#ye-Ø <sub>5</sub> -the-ṭ-dā/
	1d	nánathuṭdā	/ná-na#the-íd-ṭ-dā/
	2d	nánathuṭdā	/ná-na#the-uh-ṭ-dā/
	3d	nánaheyéṭdā	/ná-na#he-ye-the-ṭ-dā/

First, the local 1s form *nánathíídǫ́* 'I mended it' has a *na-* disjunct prefix to its left and the *the-* perfective prefix is not altered. Second, the 3s form *nánayéídǫ́* 'he mended it' gives the *the-* perfective with a conjunct prefix to its left; hence, the *the-* perfective is deleted and high tone appears on the preceding prefix which is the fourth person direct object *ye-*. These phonological changes result in a number of surface forms which masque the presence of the *the-* perfective.

### 3.3.2.3 *ne-* perfective

In similar fashion to the *ne-* imperfective (section 3.3.1.2), the *ne-* perfective is used for verbs depicting a momentary action. Those verbs which use the *ne-* imperfective always occur with *ne-* in the perfective paradigm. The *ne-* imperfective verb stems from (7) are repeated in (16) along with their *ne-* perfective counterparts which were also taken from Elford and Elford (in progress).

(16)	Imperfective	Gloss	Perfective	Underlying Form	Gloss
a.	nínesa / nísa	'I am arriving'	níniya / níya	/ní-ne-i-Ø-ya/	'I arrived'
b.	nínesda / nísda	I am returning'	nínesja / nísja	/ní-ne-s-d-ya/	'I returned'
c.	nestí	'I am sleeping (going to bed)'	niṭí	/ne-s-d-tí/	'I went to bed'
d.	nínínest'ǣ	I am bowing'	nínínest'á	/ní-ní-ne-s-d-ʔá/	'I bowed'
e.	ts'enesthi	'I am waking up'	ts'enidhër	/ts'e-ne-i-Ø-dhër/	'I woke up'
f.	nesdá	'I am sitting down'	nesdá	/ne-s-d-dá/	'I sat down'
g.	eṭk'énéste	'I am opening (a book)'	eṭk'énílá	/eṭk'é-ne-i-lá/	'I opened (a book)'

All of the verbs from (16) are momentary which implies that they occur in an instant. Take *níniya* 'I arrived' from (16a) which depicts an activity that occurs instantaneously and also has a natural inherent endpoint. That is, *níniya* 'I arrived' occurs in the moment at which the event of arriving is completed.

A typical paradigm involving the *ne-* perfective is given in (17). This particular verb stem exhibits a change where the singular forms occur with the stem *-t̥i* and the dual forms use the stem *-tes*.

(17) *Ø-t̥i/tes* ‘to go to bed’

b. Person/ Number	Perfective	
1s	<i>niṭi</i>	/ne-i-Ø <sub>2</sub> -t̥i/
2s	<i>ṇiṭi</i>	/ne-ne-Ø <sub>2</sub> -t̥i/
3s	<i>néṭi</i>	/Ø <sub>5</sub> -ne-(H)-Ø <sub>2</sub> -t̥i/
1d	<i>nítes</i>	/ne-íd-Ø <sub>2</sub> -tes/
2d	<i>nuhtes</i>	/ne-uh-Ø <sub>2</sub> -tes/
3d	<i>henétes</i>	/he-ne-(H)-Ø <sub>2</sub> -tes/

Once again, the *ne-* perfective occurs to the left of the local forms as in *niṭi* ‘I went to bed’, but appears to the right of the 3s and 3d forms, *néṭi* ‘he went to bed’ and *henétes* ‘they went to bed’, respectively.

Furthermore, two morphophonological issues result from the paradigm in (17). First, as with the other perfective prefixes, the *i-* first person singular form surfaces with verbs exhibiting Ø- and *ɨ*- classifiers. Second, the surface realization of the *ne-* perfective is somewhat different than the *ne-* imperfective in the third person forms of some paradigms which is the case in (17). The third person singular perfective form *néṭi* ‘he went to bed’ and the third person dual form *henétes* ‘they went to bed’ have high tone on the antepenultimate (second to last) syllable which is represented as (H) in the underlying form of the verb. At this time it is unclear why high tone occurs in the third person forms of some verbs which include the *ne-* perfective. See Cook (forthcoming) for details on this phenomenon.

### 3.3.3 Section Summary

This concludes the outline of the imperfective and perfective prefixes in Chipewyan.

Overall, each prefix exhibits different morphophonological characteristics. Brief discussions of the general semantic properties of each group of verbs were also provided; however, an in-depth analysis of these semantic qualities is given in chapter five.

In addition to imperfective and perfective aspect, optative mode is also present in position 3 of the Chipewyan verb template from (10) in chapter two and, therefore, requires a brief discussion. For a number of analyses, such as Rice (1989) and Rice and Hargus (1989), the notions of aspect and mode as they are defined in section 3.1 are not assumed to contrast in some of the Athabaskan languages.

Section 3.4 argues that Chipewyan mode exhibits a function separate from that of aspect where mode is relevant to the sentence and aspect is relevant to the verb or verb phrase. Section 3.5 provides evidence for a formal difference between aspect and mode in Chipewyan based on their morphosemantic distributions.

### 3.4 MODE IN CHIPEWYAN

Although mode is not a focal part of the present analysis, it is necessary to distinguish it from aspect in Chipewyan. Cook (forthcoming) defines the optative mode as ‘referring to the wishes, feelings, and opinions of the speech participants, i.e. the speaker and the addressee’. This corresponds somewhat with Bybee’s (1985: 167) general definition of mode where it is defined as a ‘marker on the verb that signals how the speaker chooses to put the proposition into the discourse context’ where these choices can involve wishes, feelings, and opinions, among others.<sup>11</sup> Cook’s argument that Chipewyan optative

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<sup>11</sup>What is referred to as the optative mode in Chipewyan appears to indicate modes other than optative such as the imperative, a direct command, and the exhortative as in ‘let me (come)’, ‘let him (come)’ Further,



### 3.5 THE MORPHOSEMANTIC DISTRIBUTION

The aspect and mode prefixes outlined in the previous sections are considered to be fairly straightforward in much of the Athabaskan literature (Li 1946, Golla 1970, Rice and Hargus (1989). Although a few grammars such as Young and Morgan (1980) and Smith (1991) note that these prefixes exhibit a morphosemantic pattern of some nature, explicit outlines or generalizations of this pattern are not provided. This section provides evidence which supports a formal separation between aspect and mode in Chipewyan. Moreover, imperfective and perfective pairs which are labeled conjugation patterns are demonstrated to result from this same distribution.

The table in (19) represents the Chipewyan verb corpus illustrating the morphosemantic distribution of aspect and mode markers. Five verbs, which will later be demonstrated to have different semantic characteristics, are plotted in the table against the three imperfective prefixes, *Ø-*, *ne-*, and *the-*, the three perfective prefixes, *ghe-*, *ne-* and *the-*, and the *wa-* optative. If the verb is grammatical with a particular aspect/mode prefix a check mark  $\checkmark$  is present. If the resulting form is ungrammatical an asterisk  $*$  is given.

(19) Aspectual Conjugation Markers

	Verbs	Imperfective			Perfective			Mode
		<i>Ø-</i>	<i>ne-</i>	<i>the-</i>	<i>ghe-</i>	<i>ne-</i>	<i>the-</i>	
a.	<i>d-yēn</i> 'to sing'	$\checkmark$	*	*	$\checkmark$	*	*	$\checkmark$
b.	<i>d-da</i> 'to sit down'	*	$\checkmark$	*	*	$\checkmark$	*	$\checkmark$
c.	<i>ī-bēs</i> 'to boil it'	$\checkmark$	*	*	*	*	$\checkmark$	$\checkmark$
d.	<i>Ø-tī</i> 'to sleep'	*	*	$\checkmark$	$\checkmark$	*	*	$\checkmark$
e.	<i>de...l-gai</i> 'to be white'	$\checkmark$	*	*	*	*	*	$\checkmark$

As can be seen in (19), each verb is grammatical with only one of the imperfective prefixes and one of the perfective prefixes. First, the verb stem *d-yēn* 'sing' is grammatical with the





whereas aspect has scope over the verb or verb phrase. This difference in scope implies that aspect is more relevant to verb than mode, hence, it is more likely that the application of certain aspects will depend on the semantic properties of the verb. In contrast, mode is less relevant to the verb, therefore, it will be less restricted in its relationship with the verb. Hence, Bybee's predictions are played out in Chipewyan.

Second, the mutual exclusivity of the imperfective and perfective aspect prefixes results in inflexible conjugation patterns. Four of the five patterns present in Chipewyan include one imperfective prefix and one perfective prefix. A fifth pattern involves an imperfective prefix only where none of the perfective prefixes are permissible. A summary of the conjugation patterns in Chipewyan are given in (20).

(20)	Imperfective	Perfective	Label
a.	Ø- imperfective	ghe- perfective	Ø-γ
b.	ne- imperfective	ne- perfective	n-n
c.	Ø- imperfective	the- perfective	Ø-θ
d.	the- imperfective	ghe- perfective	θ-γ
e.	Ø- imperfective	N/A	N/A

The first three conjugation patterns are used in active verb paradigms and the last two patterns are used in conjunction with stative verbs. Each verb always chooses the same set of imperfective and perfective prefixes in Chipewyan. That is, verbs which occur with the *ne-* imperfective always use the *ne-* perfective, and are never found with the *the-* perfective or the *ghe-* perfective. In a similar fashion, verbs which use the *the-* imperfective always occur with the *ghe-* perfective: i.e., never the *the-* perfective or the *ne-* perfective.

Each of the patterns identified in (20) has been given a label which is found in the leftmost column. Rather than use the orthographic symbols for each prefix, the IPA symbols are used. For example, the stative pattern in (21d) which uses the *the-* imperfective and the

*ghe-* perfective:  $\theta$  is used to refer to the *the-* imperfective and  $\gamma$  is used to refer to the *ghe-* perfective. Examples of each pattern are repeated in (21).

(21)	Label	Imperfective	Gloss	Perfective	Gloss
a.	$\emptyset$ - $\gamma$	hesjĕn	'I am singing'	ghesjĕn	'I sang'
b.	n-n	nesdá	'I am sitting down'	nida	'I sat down'
c.	$\emptyset$ - $\theta$	hesbĕs	'I am boiling it'	thiĭbĕs	'I boiled it'
d.	$\theta$ - $\gamma$	theṭi	'I am sleeping'	ghiṭi	'I slept'
e.	$\emptyset$ -	delgai	'it is white'	N/A	

The labels provided for each class refer to the morphological properties of verbs in Chipewyan resulting in five classes. Although some remarks about the distribution are present in the literature on Navajo, as in Smith (1991), it is often concluded that a pattern between the non-lexical aspect prefixes (imperfective and perfective) and the semantic properties of the verbs to which they correlate cannot be established. In contrast, it has been maintained by Kari (1979) and Smith (1991), among others, that a verb has to have certain inherent semantic properties in order to allow the addition of derivational prefixes. An example of this was given in chapter two where verbs that are inherently seriative, such as *neshúł* 'you are blowing it', can occur with a semelfactive prefix, as in *hĭshúł* 'you are blowing it once'. Interestingly, the perfective form *ghĭshúł* 'you blew it repeatedly' does not add the semelfactive prefix *é-* to obtain a semelfactive reading. Instead, the *the-* perfective appears instead of the *ghe-* perfective resulting in *thĭshúł* 'you blew it once'. Such an alternation suggests that the distribution of the imperfective and perfective prefixes illustrated in (19) is related to semantic characteristics.

### 3.6 SUMMARY

After having identified the terms non-lexical aspect and mode from crosslinguistic perspectives of Comrie (1976) and Bybee (1985), the morphophonological and semantic characteristics of each aspect and mode prefix present in Chipewyan were given. This

chapter provided evidence which supports a formal separation between aspect and mode in Chipewyan. Moreover, conjugation patterns were demonstrated to result from this morphosemantic distribution. Although such a distribution has been established in this chapter, it is not yet clear what semantic characteristics each conjugation pattern favours. In order to resolve this problem it is necessary to use a theory which can compare non-lexical aspect and lexical aspect. The following chapter examines four Athabaskan verb classification systems ranging from traditional Athabaskan analyses to a crosslinguistic effort which accomodates both Athabaskan and non-Athabaskan languages. While the three traditional models contribute somewhat to the present analysis, the last model provides a general framework in which the morphosemantic properties of the Chipewyan aspect prefixes can be identified.

## CHAPTER 4

### ATHABASKAN SEMANTIC CLASSIFICATIONS

This chapter outlines previous and modern approaches to Athabaskan verb classification. In the first section, 4.1, Li (1946), Kari (1979), and Rice (1989) are outlined and discussed. First, Li (1946) studies the Chipewyan grammar devoting time to an analysis of verb root derivation which touches on both lexical aspect and non-lexical aspects. Li, however, focuses on the possible derivations a verb root can have rather than the morphosemantic distribution of the imperfective and perfective prefixes, which is the focus of this thesis. Kari (1979) and Rice (1989) are also concerned with the derivational potential of verbs. Both use an elaborate model of verb theme classification for Ahtna and Slave, respectively, which groups verb themes according to their morphological structure and basic semantic properties. Despite the foundation these analyses provide, they lack systematicity when laying down their morphological and semantic criterion.

The second portion of chapter four provides a detailed description of Smith's modern approach to verb classification which categorizes verbs according to their lexical content (situation aspect) and their aspectual perspectives (viewpoint aspect), such as imperfective and perfective aspect. Smith's perspective is adopted to determine the organization of Chipewyan verbs according to their lexical aspect (situation aspect) and morphological conjugation pairs (imperfective and perfective aspect). Further, Dowty's (1979) grammatical tests are demonstrated to support each situation type.

## 4.1 Previous Athabaskan Verb Classifications

### 4.1.1 Li (1946)

#### 4.1.1.1 The Model

The goal of Li's (1946) analysis is to understand how the verb undergoes theme derivation when it occurs with different prefixes. Li proposes that each verb has a set of stems which is used to form different but related verb themes. Although Li does not specifically refer to a basic abstract verb form, he suggests that related verbs are derived from one common form. The term *abstract root* is used to refer to the abstract form of the verb from which each of Li's verb theme derivations occurs. Li's purpose is to illustrate how the meaning of each derived verb changes based on the *mode* in which it appears. In order to understand how each verb's meaning changes, Li (1946) focuses on the derivation of one abstract root into five verb themes which he labels *modes*. These *modes* are neuter, momentaneous, continuative, customary and progressive. Each *mode* appears in imperfective and perfective aspects as well as optative mode.<sup>1</sup> A summary of Li's model is provided in (1).<sup>2</sup>

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<sup>1</sup>Li (1946) referred to imperfective, perfective, and optative (future) as *aspects*.

<sup>2</sup>Li's modes are highly reminiscent of Semitic *binyanim*, where a given verb root may appear in different *binyanim*, with different meanings, some of which are more transparently related than others.

(1) Root: 'to handle a living being'					
Mode	Imperfective	Perfective	Optative		Gloss
a. neuter	thiṭi	ghiṭi	wasté		'I am lying/had lain/shall lie'
b. momentaneous	nesté	niṭi	nusté <sup>3</sup>		'I am lying down/have lain down/shall lie down'
c. continuative	náste	nátheti	náwasté		'I dream/have dreamt/shall dream'
d. customary	dzéréste	dzéréghiṭe	dzéréwasté		'I am carrying it around/have carried it around/shall carry it around'
e. progressive	daghestēṭ	daghiṭeṭ	dawastēṭ		'I am holding it/have been holding it/shall hold it up'

The abstract root used in the derivations in (1) is translated into English as: 'to handle a living being'<sup>4</sup>. Each of Li's *modes* alters the meaning of the basic verb stem. Some verb roots can be derived in all five *modes*, like the verb root in (1), while others may only be derived in two or more *modes* depending on their inherent semantic content. Li's model does not associate verbal categories with conjugation patterns, nor does he make a distinction between inflectional aspect and mode. However, it is demonstrated throughout this discussion that the conjugation patterns can be correlated with each of Li's modes.

#### 4.1.1.2 The Modes

From (1a), Li posits a *neuter mode* which is the only *mode* in his analysis to have a stative interpretation. Li defines the neuter verb as referring to a state or position. The neuter verb stem illustrated in (1) is *-ṭi/ṭiṭe* which Li (1946:405) defines as 'a living

<sup>3</sup>As mentioned in chapter three, a small number of verbs exhibit a *ne-* prefix in the *wa-* optative forms. These have been found in verbs occurring in the *ne-* perfective and the *ghe-* perfective. It is unclear at this time what this *ne-* prefix might represent. Further investigation into this matter would be helpful. See Rice and Hargus (1989) for a related discussion.

<sup>4</sup>Li (1946) does not provide the Chipewyan root of the verbs in (1). He merely gives the reader the English translation.

being is in position, i.e., to lie'. Other Chipewyan verbs such as *theda* 'he is in sitting position' and *thiyi* 'he is in a standing position' are included under the *neuter mode* label. Verbs which are adjectival in nature such as *nechá* 'it is big' and *delgai* 'it is white' are also considered to be neuter verbs. Although Li does not provide this observation himself, his *neuter mode* co-occurs with one of the previously established conjugation patterns: verbs identifying a state or position occur with the  $\theta$ - $\gamma$  ( $\emptyset$ -ghe) morphological class; however, adjectival verbs only occur with the  $\emptyset$ -imperfective in Chipewyan. In other words, Li has one *neuter* or *stative mode* which contains two morphological classes of verbs.

Li proposes that the verb stem used in the *neuter mode* *t̥i./t̥i/té* 'to be in lying position' in (1a) is related to the *momentaneous* verb stem *-t̥é/t̥i* 'to lie down' in (1b). According to Li, verbs in this mode refer to a rapid action or transition from one state to another. Li (1946:406) defines the stem in the *momentaneous mode* of (1) as: 'a living being gets into position or acts, i.e., to lie down'. This verb is typical of the *momentaneous mode* where the event occurs over a relatively short time span. Verbs such as *nedá* 'he is sitting down' and *nlnesa* 'I'm arriving' are also members of the *momentaneous mode*. Li does not acknowledge that the n-n conjugation pattern is used in conjunction with verbs in the *momentaneous mode* as exemplified in (1) by *nesté* 'I am lying down' and *niṭi* 'I have laid down'.

As illustrated in (1) *continuative mode* is also possible. Li refers to continuative verbs as referring to an activity which lasts for a certain period of time. More specifically, Li (1946:406) defines the verb stem *-te/t̥i/té* as: 'a living being acts continually, i.e., to dream (to lie around)'. Continuative verbs commonly utilize the  $\emptyset$ - $\theta$  class pattern. An example of this pattern is given in (1c) where *nasté* 'I am dreaming' uses the  $\emptyset$ -

imperfective and *nátheŋj* 'I dreamed' uses the *the-* perfective; however Li does not state this conjugation pattern.

As demonstrated in (1) the fourth of Li's modes can also be derived which is the *customary mode*. Li thinks of customary verbs as referring to actions which are customary or repeated. Specifically, Li (1946:406) defines the verb stem *-te/te/te* in (1d) in the following manner: 'to handle a living being customarily or repeatedly, i.e., to carry it around'. In (1d). *dzéréste* 'I am carrying it around' is unmarked in the imperfective and has the *ghe-* perfective as in *dzéréghiŋte* 'I carried it around'. This suggests that verbs which are considered to be part of the *customary mode* occur with the Ø-γ conjugation pattern.

Also possible in (1) is the fifth mode which is labeled the *progressive mode*. Progressive verbs refer to activities which are ongoing as one is moving along. Li (1946:406) defines the progressive verb stem *-tēŋ/tēŋ/tēŋ* in (4) as : 'to keep handling a living being, i.e., to hold it'. This category of verbs is typically found with a *ghe-* imperfective and *ghe-* perfective pattern which is not addressed in this thesis. Verbs with this morphological pattern are present in modern Chipewyan, however, only 6 or 7 of these verbs have been identified in a corpus of over four hundred of verbs. Therefore, it is suggested that this conjugation pattern is no longer a productive inflectional pattern. Instead, the morphological patterns from verbs in Li's *progressive mode* are believed to have derivational properties; in other words they use secondary aspectual morphology.



#### 4.1.1.3 Discussion

Overall, Li provides a two dimensional model of Chipewyan verbs where various verb stem sets characterize inherent aspectual qualities, and each set inflects for aspect and mode. Li's focus lies in the area of derivational potential in that he presents a model where five sets of derivationally related themes, or *modes* as Li labels them, may be derived from a single abstract root in Chipewyan. Li's analysis overlaps with the semantic approach applied in this thesis but the focus is somewhat different. Li is less concerned with the inherent semantic properties of Chipewyan verbs than with the possible derivations an individual root can achieve. Li's focus on derivation requires him to deal with a small corpus of verbs. In contrast, the approach in use in this thesis includes a larger inventory of verbs focusing on semantic properties rather than derivational potential.

Although Li (1946) identifies a large portion of the derivational morphological properties evident in the Athabaskan verbs, he does not explicitly discuss the inflectional characteristics of Chipewyan in conjunction with his five classes or *modes*. As can be seen in (2), the conjugation markers which correspond with each of Li's modes are provided.

(2)	Mode	Conjugation Pattern
	neuter	θ-Y
	momentaneous	n-n
	continuative	Ø-θ
	customary	Ø-Y
	progressive	Y-Y
Note: Y=gh		
θ=th		

Each *mode* occurs with one pattern. For example, the *momentaneous* verbs exhibit the n-n conjugation pattern. Li does not illustrate the connection between the conjugation

patterns and the verb classes, however, it is apparent upon examining the data in (1) that these morphological properties likely play a role in his Chipewyan verb classes.

#### 4.1.2 Kari (1979)

##### 4.1.2.1 The Model

A classification system for verb themes is also proposed in Kari's (1979) analysis for Ahtna, another Northern Athabaskan language which is somewhat more conservative than Chipewyan. In Kari (1979), the verb theme is viewed as 'the underlying lexical specification and the common structural denominator that underlies all attested derivations'. That is, verbs sharing a common theme are derivable from the same abstract root through aspectual derivations. Verb themes are grouped into classes labeled *verb theme categories* which are defined in terms of semantic and morphological criteria.

A summary of these categories is provided in (3). Kari arranges his ten verb theme categories into two columns for active and neuter (or stative) verbs and four rows where each of these four rows holds one of Kari's primary aspectual strings and the corresponding conjugation patterns which are underlined in (3). Each of the ten verb theme categories are listed under their primary aspectual string and are in italics for identification purposes. Kari provides four active categories (*motion*, *successive*, *operative*, and *conversive*) and six neuter verb theme categories (*extension*, *stative*, *position*, *classificatory*, *descriptive*, and *dimensional*).

## (3) Kari's Verb Theme Categories (Kari 1979: 67)

Active			Neuter		
nA PAS: <u>(n,n)</u> <u>momentaneous</u>		'arrive at'	nN PAS: <u>(n,gh) neuter</u>		'extend to'
<i>motion</i>	niya:	'he arrived'	<i>extension</i>	niʔa:	'it extends'
ghA PAS <u>(Ø,gh) durative</u> <i>successive</i>	ighitse:tl'	'perform action duratively' 'he chopped it repeatedly'	—		
<i>operative</i>	ighigha:n	'he made objects'			
sA PAS: <u>(Ø,s) conclusive</u> <i>conversive</i>	zɖledz	'complete a process' 'he urinated'	sN PAS: <u>(s,gh) neuter</u> <i>stative</i> <i>positional</i> <i>classificatory</i>	dezq'uat's zda: z'a:n	'be in a state or position' 'it is cold' 'he is seated' 'compact object is in position'
—			ØN PAS: <u>(Ø,gh) neuter</u> <i>descriptive</i> <i>dimensional</i>	nle:n dghildes	'it, he is' 'it is heavy'

Note: Verb Theme Categories are in *italics*  
 Primary Aspectual Strings (PAS) are underlined  
 A = Active and N = Neuter

Because Kari (1979) provides such a detailed verb classification each category is not discussed individually in this thesis. In order to adequately explain some of the properties of Kari's model of verb theme categories, two of the verb theme categories, the *operative* and *successive* verb themes, are discussed and compared below.

#### 4.1.2.2 Verb Theme Categories

Verb theme categories are defined in terms of both semantic and morphological criteria. In terms of semantic criteria, verb themes are related if they share common lexical specifications, and in terms of morphological criteria, verb themes are related if they share common structural or morphological properties. On a semantic level, Kari

(1979:124) explains that *operative* themes refer to actions sustained over a period of time. They do not refer to sequential repetition of the action (which is the *successive* verb theme category), nor to the termination of the action (which is the *conclusive* verb theme category). The Ahtna verbs listed in (4a-c), below all belong to the *operative* verb theme category:

(4)	Verb	Gloss
a.	ghadna	'he worked'
b.	k'edghidle	'he sang'
c.	ighigha:n	'he made objects'

For example, *ghadna* 'he worked' implies the activity of working occurs over time but the event is not successive, and termination of the event is not implied. According to Kari, the same entailment can explain both *k'edghidle* 'he sang' of (4b) and *ighigha:n* 'he made objects' in (4c): both events are activities which are sustained over a period of time.

In relation to morphological criteria, derivation is the focus of Kari's verb theme classification. Kari claims that each verb theme category has characteristic derivational potential which includes the prediction of aspect and mode. Each verb theme category has a singular string of aspect and mode prefixes with which it most commonly occurs. Kari refers to this common aspectual string as the primary aspectual string (PAS). The *operative* verb theme category occurs with the *durative* primary aspectual string which corresponds with the Ø-γ conjugation pair in Ahtna. In some instances a verb theme may have more than one aspectual string. For example, Kari contrasts the derivational properties of the *operative* verb theme category with the properties of the *successive* verb theme category. Verbs from these two Ahtna categories are given in (5).

(5)	Verb Theme Categories	Gloss
1.	Operative Verb Theme	
a.	ghadna	'he worked'
b.	k'edghidle	'he sang'
2.	Successive Verb Theme	
a.	ighiŋqa:tl'	'he chopped it repeatedly'
b.	ighiŋdek'	'he shot it with arrows'

*Operative* verbs, such as *ghadna* 'he worked', are morphologically similar to *successive* verbs like *ighiŋqa:tl'* 'he chopped it repeatedly' in that both verb theme categories can occur with the Ahtna equivalent of the Ø-γ pattern of the *durative* primary aspectual string. In addition, however, the *successive* verb themes can also occur with the cognate of the Ø-θ pattern to indicate a semelfactive meaning as in *yiz'aŋ* [yi-z-ʔaŋ] 'he bit it once'. In contrast, verbs of the *operative* verb theme category are not acceptable with the Ø-θ pattern. To further support the contrast between the *operative* and *successive* verb theme categories, Kari discusses a derivational prefix used to derive a semelfactive form which can occur with *successive* verbs but not with *operative* verbs. A semelfactive is a single act or event. That the semelfactive prefix is only grammatical with *successive* verbs is expected based on the inherent aspectual qualities possessed by verb themes of this category, where it is possible for a semelfactive event to occur over and over again. *Operative* verbs are inherently durative unlike *successive* verbs and, therefore, cannot have a semelfactive derivation.

#### 4.1.2.3 Discussion

Kari's model is similar to Li's analysis in that both attempt to account for predictable verb stem variation according to derivational aspect. Kari differs from Li by developing the notion of verb theme category as the main feature of subcategorization (Cook, 1984). In other words, Kari believes that verb theme categories determine the range of aspectual derivation a given verb theme will demonstrate.

Furthermore, Kari from previous analyses of imperfective and perfective aspect, such as Li (1946) and Cook (1984), by claiming that these aspect prefixes are derivational in Athabaskan languages. According to Li, imperfective and perfective are inflectional categories. However, Kari considers imperfective and perfective aspect to be derivational prefixes in Ahtna where this thesis observes that Chipewyan aspect exhibits both inflectional and derivational properties. He postulates three levels of derivation which are identified and described below in (6).

(6) Level		Description
1.	Lexicon	thematic prefixes, root, theme category
THEME		
2.	Derivation	a. mode and aspect categories b. non-aspectual derivation (iterative, causative, passive)
BASE		
3.	Inflection	gender, person, and mode-negative <sup>5</sup>

The first level, the *lexicon*, identifies the portions of the verb which are included in the lexical entry; thematic prefixes, root, theme category. The lexical entry is also referred to as the theme. At the second level, derivational prefixes are added to the verb. These include derivational aspects such as the inceptive and the terminative which are restricted to certain sets of verbs based on their inherent semantic content. Kari also includes the optative, imperfective, and perfective prefixes in the second level. In contrast to the inceptive and terminative derivational prefixes which have a restricted distribution, the imperfective and perfective prefixes are productive across the verbal category. It is the individual forms of the imperfective and perfective prefixes which are restricted in their distribution. Based on the restricted distribution of the two aspect prefixes, they can be

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<sup>5</sup>A negative prefix exists in Ahtna as well as other Athapaskan languages. However, this category does not occur in Chipewyan.

considered derivational in some regards. In fact, this is part of Kari's motivation for considering imperfective and perfective derivational in Ahtna; however, Kari also maintains that mode is derivational which is not supported by the differing distributions of aspect and mode. It seems that Ahtna mode would be best represented as an inflectional category in level three in (6) with the person and gender prefixes, with the two aspect categories remaining in the derivation level.

Overall, Kari notices the morphological pattern which distinguishes the aspect prefixes from the mode prefixes; however, he does not focus on this phenomena. Instead, Kari is concerned with categorizing verb themes based on their derivational potential. Further, Kari's model does not formulate specific semantic criteria for categorizing verbs, which is problematic when including Athabaskan languages in crosslinguistic comparisons.

#### **4.1.3 Rice (1989)**

##### **4.1.3.1 The Model**

Rice (1989) provides verb theme categories for Slave where she postulates the same ten verb categories as present in Ahtna which is surprising because Rice 's model for Slave is based on Kari's (1979) work on Ahtna. Also, Ahtna and Slave are both more conservative than Chipewyan, with Ahtna remaining the most conservative. Under Rice's (1989) assumptions, the verb theme is an uninflected word which is not compositional in nature. She proposes that verb themes within a verb theme category have shared possible aspects and derivational properties as well as common semantic characteristics.

Rice (1989:871) explains that her verb theme categories are established on the basis of five general criteria which are identified in (7) below.

(7) Rice's (1989: 871) Criteria for Verb Theme Categories

1. Themes within a verb theme category can occur in the same aspects.
2. All verb themes occur in a primary base, the simplest base without added derivational material, the base consisting of the theme alone. For all themes within a particular theme category, the conjugation pattern required by the primary base is the same.
3. Themes within a theme category are generally homogeneous in terms of derivational potential. Across theme categories, derivational potential differs.
4. Themes within a theme category require the same aspect and conjugation morphology in the distributive compounding aspect (see section 2.2.7, chapter 2). Across theme categories, there are differences in distributive morphology.
5. Verb themes within a theme category have shared semantic features.

Like Kari (1979), Rice's primary concern for verb classification is morphological material including conjugation markers and derivational processes.<sup>6</sup> Rice differs from Kari in the stronger emphasis she places on conjugation patterns. However, Rice postulates that the primary base, the simplest base without derivational material, is what requires the same conjugation pattern.

A list of Rice's (1989:872) ten verb theme categories is given in (8). Each verb theme category is listed with its primary aspectual string (PAS) in the center column.<sup>7</sup> The conjugation pattern which co-occurs with each primary aspectual string is also listed in the middle column. Rice's conjugation pattern includes imperfective and perfective aspect, and optative mode which she groups together in one category labeled *mode*. Also in (8), one example for each verb theme category is provided in the rightmost column.

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<sup>6</sup>Rice (1989) does not explicitly state whether she considers the imperfective and perfective prefixes to be derivational or inflectional.

<sup>7</sup>As with Kari (1979), the primary aspectual string is the most common aspect in which a given verb theme appears.



(8)	Verb Theme Category	PAS and CMs	Slave (Rice 1989)
a.	Motion (active)	momentaneous n,n,n	n̄iya 's/he arrived'
b.	Extension (neuter)	neuter n,y,n	n̄iʔa 'it extends'
c.	Successive (active)	durative Ø,y,Ø	O ȳihk'e 's/he shot pl. O'
d.	Operative (active)	durative Ø,y,Ø	O ȳiʔa 's/he ate O'
e.	Conversive (active)	conclusive Ø,w,Ø	theht̄si 's/he/ made O'
f.	Classificatory (neuter)	neuter w,y,w	O wheʔq 'compact O is located'
g.	Positional (neuter)	neuter w,y,w	theda 's/he is seated'
h.	Stative (neuter)	neuter w,y,w	wek'a 'it is cold'
i.	Dimensional (neuter)	neuter Ø,y,Ø	nechá 'it is big'
j.	Descriptive (neuter)	neuter Ø,y,Ø	ĩli 'it, he is'

Note: Each conjugation marker pattern (CM) in the middle column is ordered imperfective, perfective, optative.  
O=direct object

#### 4.1.3.2 Verb Theme Categories

To illustrate the criteria forming each verb theme category consider the motion verb theme listed in (8a) which is exemplified by *n̄iya* 's/he arrived' Rice claims that motion verbs involve movement of some kind. Semantically, she refers to *motion* verbs as going verbs, handling verbs, and verbs of falling. Each of the three semantic types of verbs is illustrated with two verb stems in (9). Each verb form is represented by a classifier followed by a verb stem, eg. *Ø-dah* 'sg. go'.

(9) <u>Motion Verbs</u>		
Going Verbs	a. Ø-dah	'sg. go'
	b. Ø-ʔeeh	'go by water'
Handling Verbs	a. Ø-tʰh	'handle stick like object'
	b. h-téeh	'handle animate object'
Falling Verbs	a. h-su	'slide'
	b. l-súh	'drag'

Morphologically speaking, *motion* verbs occur with a large number of derivational prefixes which, Rice claims, is due to the fact that several semantic categories of verbs are encompassed in the motion verb theme category. She explains that *motion* verb themes can occur with three aspects where *momentaneous* aspect is the most common and is, therefore, the primary aspectual string for motion verbs. Some motion verbs occur in aspects which Rice labels *repetitive* and *continuative*. The example in (10) illustrates a verb stem that can occur in all three of these aspects.

(10) Aspect	Verb	Gloss
a. Momentaneous	n̥iya	's/he arrived, came to a point'
b. Repetitive	k'ínadah	's/he is walking around'
c. Continuative	nátheʔe	's/he went, made a trip by boat'

First, in (10a) *n̥iya* 's/he arrived' *momentaneous* is the primary aspectual string for this motion verb. As given in (10b) *k'ínadah* 's/he is walking around' is the *repetitive* form of the same theme, and *nátheʔe* 's/he went, made a trip by boat' of (10c) is the *continuative* form.

Moreover, Rice proposes that some aspects can co-occur in the same verb which she refers to as compounding aspect. The three aspects illustrated above can combine with four compounding aspects in motion verbs: *progressive*, *customary*, *distributive*, and the

*customary-distributive* compound aspect. See Rice (1989) for descriptions and examples of each of these derivationally compounding aspects.

#### **4.1.3.3 Discussion**

Rice's (1989) model for verb theme categories is remarkably similar to Kari's (1979) approach. In particular, Rice and Kari both consider the verb theme category to be the main feature of subcategorization. In other words, they support the concept that the verb theme category to which a given verb belongs is identified in the lexicon. Further, the verb theme category determines the possible derivations. Rice, like Kari, remarks that verbs of one verb theme category are semantically related. This relationship is not well established in either model: definitions are provided for each verb theme category and aspect category, but supporting evidence for such claims are not provided.

#### **4.1.3 Summary of Traditional Classifications of Athabaskan Verbs**

The three models discussed above contribute in part to the present analysis. First, Li (1946) provides the foundations of the Chipewyan grammar. Li illustrates the derivational properties of the Chipewyan verb root by proposing five possible *modes* which represent five derivationally related themes from one verb root. Li's model includes imperfective and perfective aspect, as well as optative mode. He perceives all of these prefixes to be highly productive inflectional prefixes which can apply to all verbs in Chipewyan. Li's perception of aspect and mode is adequate at a level of general application; however, he does not acknowledge that the individual forms of imperfective and perfective aspect are distributed across the verb corpus according to their inherent semantic characteristics.

Second, Kari (1979) provides a groundbreaking analysis of theme derivation in Ahtna where he proposes that verbs derivable from the same root through aspectual derivations represent the same theme. Like Li, Kari is concerned with the derivational potential of verb themes and categorizes them on this basis. Kari differs from Li and the present analysis by claiming the prefixes under discussion are strictly derivational. Kari acknowledges the morphosemantic distribution of the imperfective and perfective aspect prefixes but seems to ignore the fact that the aspect and mode prefixes are distinguished from one another based on their distributions: Kari maintains that both aspect and mode prefixes are derivational. Overall, Kari's analysis is highly detailed but lacks systematic morphological and semantic criterion.

Third, Rice (1989) extends Kari's verb theme categories to Slave. In relation to the present analysis, Rice's focus is derivational morphology; although, the conjugation pairs are included in her model. Rice's (1989) differs from Kari (1979) by providing a definite set of criterion for Slave verb theme categories. Nonetheless, Rice, like Kari, still lacks systematic criterion for semantic classification.

In comparison to previous Athabaskan models of verb classification, recent studies in Athabaskan linguistics are sensitive to some of the problems outlined above (Smith 1991, 1996, Midgette 1996). In particular, recent approaches, such as Smith (1991), explain Athabaskan languages under more general frameworks of semantic classification. This thesis adopts Smith's (1991) framework which is used to organize French, Navajo, and Mandarin Chinese, among others. The details of Smith's framework are outlined below, in conjunction with a variety of Dowty's (1979) grammatical tests to support each of Smith's verb classes.

## 4.2 Smith (1991)

In contrast to the three previous analyses, Smith's (1991) perspective of verb classification is more general and applies crosslinguistically. Smith's approach was originally developed to organize English verbs and has subsequently been applied to include a variety of languages, including Navajo, French, and Mandarin Chinese. The concept of aspect under Smith's (1991) framework is aligned with Comrie's (1976:3) perspective where: "aspect is the semantic domain of the temporal structure of situations and their presentation". Given this definition of aspect, Smith's efforts focus on re-interpreting the aspectual systems of a variety of languages under a general approach which involves situation aspect and viewpoint aspect. Situation aspect refers to the internal event structure, or *aktionsart*, of verbs. In contrast to situation aspect, Smith (1991:5) explains "the viewpoint of a sentence presents an event with a particular extent and focus, rather as a camera lens". Smith believes that sentences present aspectual information for both the situation type and the viewpoint. Moreover, Smith (1991) proposes that viewpoint aspect and situation aspect are realized in a given language in separate ways. Most often, viewpoint aspect is expressed by contrasting morphemes in the inflectional system. However, situation aspect is not usually grammaticized by contrasting morphemes. Rather, it is determined by "verbal constellations of lexical morphemes that refer to situations"(Smith, 1991: 10). In other words, Smith maintains that situation type is determined by an array of derivational strategies.

The subsections which follow outline both viewpoints and situation types, according to Smith (1991). First, viewpoint is outlined and compared with the definitions of imperfective and perfective aspect assumed in this analysis. Because the present analysis is concerned with the morphological distribution of imperfective and perfective aspect Smith's notion of viewpoint aspect, which is conceptually based, is not discussed in depth

at this time. Smith's situation types are adopted in chapter five and are outlined in detail below.

#### 4.2.1 Viewpoint Aspect

First, viewpoint aspect provides a full (perfective) or partial (imperfective) view of a situation and is usually signaled by a grammatical morpheme or morphemes; it is often part of the verb or verb phrase. The three main types of viewpoints are (1) imperfective, (2) perfective, and (3) neutral, which are defined in Smith's terms below in (11).

(11) Viewpoint	Description
a. Perfective	focus on the situation as a whole with initial and final points
b. Imperfective	focus on part of a situation, including neither initial nor final point
c. Neutral	flexible, including the initial point of a situation and at least one internal stage (where applicable).

These definitions of perfective and imperfective correspond with Comrie's (1967) definitions provided in chapter three. Comrie defines perfective aspect as viewing the situation from the outside without looking at the internal structure of the situation, and he defines imperfective aspect as focusing on the internal situation. In comparison, Smith defines the perfective viewpoint as focusing on the whole situation, and the imperfective viewpoint as focusing on part of a situation.

Smith's viewpoints (imperfective, perfective, progressive, and neuter) acknowledge the significance these concepts have in a semantic verb classification; however, Smith does not address the morphological and distributional patterns each of these viewpoints exhibits. That is, she does not address the distribution of the individual aspect and mode prefixes which is the topic of this thesis. Further, Smith's notion of viewpoint aspect has broader scope than required for this thesis because Smith includes usitative and iterative *modes* in her analysis which are not discussed here. Given the differences between

Smith's perspective of viewpoint aspect and the morphological perspective taken here, Smith's viewpoint aspect is not discussed in this thesis.<sup>8</sup> It is important to acknowledge that Smith takes note of the significant role aspects, such as imperfective and perfective, play in the organization of situation structure.

#### 4.2.2 Situation Aspect

The situation type is the second portion of Smith's two dimensional model of verb classification. The situation type is determined by the verb and its arguments. Smith is not the first to discuss the concept of situation types. Dowty (1979) observes that it was Aristotle who first noticed that some verbs inherently involve an endpoint or result while other verbs do not. Ryle (1949) was the first to distinguish between achievements and activities, however, his approach and those preceding him were strictly examined in the realm of philosophy.<sup>9</sup> It was Kenny (1963) who added a more linguistic approach to the analyses of semantic classes by including grammatical distinctions. To the present day, one of the most widely acknowledged divisions of semantic verbal classes has been accomplished by Vendler (1967) who posited four verb classes: states, activities, accomplishments, and achievements. Dowty's (1979:54) examples of each of these classes are provided in (12).

(12)	States	Activities	Accomplishments	Achievements
	know	run	paint a picture	recognize
	believe	walk	make a chair	spot
	have	swim	deliver a sermon	find
	desire	push a cart	draw a circle	lose
	love	drive a car	push a cart	reach
			recover from illness	die

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<sup>8</sup>With further research, the idea of viewpoint aspect can be re-organized to accommodate the present analysis. Due to the complexity of the issues both viewpoint and situation aspect are not addressed in this thesis.

<sup>9</sup>Ryle (1949) labels achievements as resultatives.

Vendler's work has been adapted by a large variety of researchers, including Dowty (1979), Brinton (1988), and Smith (1991), among others.

Under Smith's (1991:28) account, there are five situation types: (1) states, (2) activities, (3) accomplishments, (4) semelfactives, and (5) achievements which are defined as follows:

*States* are static, with no dynamics and no internal structure; they have duration of at least a moment. Examples: [know the answer], [be in Athens]. *Activities* are durative atelic events; they have homogeneous successive stages and an arbitrary endpoint, e.g. [walk in the park], [laugh]. *Accomplishments* are durative telic events; they are complex consisting of a process of successive stages and a natural final endpoint. The outcome is a change of state, e.g. [build a house], [walk to school]. *Semelfactives* are instantaneous, atelic events, e.g. [knock], [cough]. *Achievements* are instantaneous changes of state, with an outcome of a new state, e.g. [reach the top], [win the race].

Smith proposes that these five situation types can accommodate any of the world's languages including English, French, Mandarin Chinese, and Navajo but these types are realized differently in each language.

Smith's adaptation of Vendler's situation types distinguishes each type with a fixed set of temporal and conceptual binary properties or features. As Smith (1991) explains, each of the situation type names - state, activity, accomplishment, and achievement, and semelfactive - serve as 'shorthand' for the cluster of properties that each class exhibits. Models such as Smith (1991) emphasize that clusters of properties represent prototypical verbs but marginal members of each class possessing a subset of characteristics are also possible. Henceforth, the type of approach which modifies Vendler's verb classes with features is referred to as the Semantic Feature Hypothesis (SFH). Smith's (1991) SFH proposal is conservative in that it uses only well established binary features and, in doing so, adequately represents the many SFH approaches available. Smith is also innovative and adds a fifth situation type to Vendler's typology which she labels semelfactive.



In section 4.2.3 three established binary distinctions used by those working in an SFH framework, particularly by Smith (1991), are outlined. Given these distinctions, each of Smith's five situation types are outlined in section 4.2.4 discussing both the innovative and conservative properties of her particular approach.

### 4.2.3 Binary Distinctions

Binary distinctions are series of two way typologies used to distinguish between verb classes. A variety of such distinctions are discussed in the literature but three of these: (i) [+/-stative], (ii) [+/-durative], and (iii) [+/-telic], are consistent throughout the analyses (Brinton 1988, Smith 1991, 1996, Midgette 1996).

#### 4.2.3.1 [+/-stative]

The binary distinction made with respect to [+/-stative] is between states and non-states. The bifurcation of situations into states and non-states, or events, is common in many of the world's languages. States are typically characterized by a lack of change, limits, and agency as well as by the inherent qualities of duration and homogeneity (Brinton, 1988:25). Smith (1991) demonstrates this commonality by drawing on French, Russian, and Mandarin Chinese stative verbs. For example the French verb *possède* 'own, have' in (13) indicates ownership, which is expected under the characterization of the state just presented.

- (13) Catherine possède un moto noir  
Catherine has a black motorcycle

Smith (1991:28) further elaborates on the concept of the state by temporally defining a state as a period of undifferentiated moments which do not have an inherent endpoint. In contrast, non-states are characterized by properties which are in opposition to those qualities held by states. For example, non-states are considered dynamic which means, for many languages, the concept of motion is fundamental. Further, change, limits, and

agency are common properties of non-states where one to all of the properties are possible. Smith (1991:28) summarize the contrast between states and non-states in English: 'an event *occurs, happens, takes place*, while a state *holds* or *obtains*.

#### 4.2.3.2 [+/-durative]

In relation to the feature [+/-durative], the distinction lies between durative and punctual situations, which are also referred to as instantaneous in the literature. Comrie (1976:41-2) defines a durative situation as one that 'lasts for a certain period of time (or at least is conceived of as lasting in time)', and a punctual situation as not lasting in time (or as being perceived as not lasting in time). Smith (1991) points out that these perceptions of punctual and durative time are conceptually based and are not measured in real time. A punctual or instantaneous event, for example, will occur in real time but as a linguistic category it is not seen as lasting in time. Moreover, events which are perceived of as punctual will, in fact, exhibit differences in time. For instance, one punctual event may occur within seconds whereas another event might occupy milliseconds. Despite a difference in real time, many verbs can be considered punctual in linguistic terms because the difference is relative rather than absolute. For example, when comparing the situations *arrive* and *build a house* both occur in real time but *arrive* is seen as occurring in an instant whereas *building a house* takes a considerable amount of time.

#### 4.2.3.3 [+/-telic]

The third binary feature is [+/-telic] which refers to telic [+telic] and atelic [-telic] situations. A telic situation involves a natural endpoint or goal whereas an atelic situation involves an arbitrary endpoint.<sup>10</sup> The English sentence *Martha is painting a picture* is

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<sup>10</sup>The term *natural endpoint* is employed to describe telic situations in order to avoid an agentive connotation. A ball rolling down a hill is a telic event, hence, agency is not a defining characteristic of telic events.

telic exemplifying a situation with a natural endpoint. That is, the result of a telic situation is implied in the verb itself: the activity of painting a picture terminates when the picture is complete. In comparison, atelic situations are simply processes which have an arbitrary endpoint which is illustrated by the sentence *Martha is running*. The activity of running can only be terminated by the addition of a terminative adverbial as in *Martha stopped running*.

#### 4.2.4 Smith's Five Situation Types

Smith's situation types are characterized by three distinctions described which have positive (+) and negative (-) values. Prior to discussing each of these situation types in detail, a summary of Smith's (1991) analysis is provided in (14). This summary includes the binary features each situation type has in relation to one another.

(14) Smith (1991)

Situation	[+/-Stative]	[+/-Durative]	[+/-Telic]
States	[+]	[+]	N/A
Activities	[-]	[+]	[-]
Accomplishments	[-]	[+]	[+]
Achievements	[-]	[-]	[+]
Semelfactives	[-]	[-]	[-]

These features and their implications are discussed in 4.2.4. Moreover, each situation type is separated from the other categories by drawing upon grammatical tests taken from Dowty (1979).<sup>11</sup> Furthermore, these grammatical tests help explain why different aspectual situation types are necessary. Dowty (1979) outlines a variety of tests which can distinguish English situation types, but he does not consider semelfactives, drawing on only Vendler's four original classes. It is Smith (1991) who introduces the semelfactive situation type and separates these situations from the other active categories with independent grammatical tests.

<sup>11</sup>Dowty's grammatical tests do not co-operate with all verbs of any given situation type: exceptions exist.

#### 4.2.4.1 States vs. Active Situation Types

The first situation type listed above in (14) is the state which Smith captures with the semantic features repeated in (15).

- (15)        +stative  
              +durative  
              N/A telic

The feature representation in (15) provides a definition in which states are viewed as situations which endure for an indefinite period of time. That is, they do not have an endpoint. English examples of states are provided in (16).

- (16)        English Examples:    (cf. (12))  
              know, believe, have, desire, love

The distinguishing feature of the state is [+stative]. In opposition, the four active situation types have a negative value for the stative feature. Smith claims that stative verbs lack telicity all together because they require the situation to specify an endpoint. Accordingly, statives lack both initial and final points. The initial point of the situation is the change into the state and the endpoint is the change out of that state. Given this argumentation, it is legitimate to conclude that telicity is not relevant for stative situations.

In relation to durativity and telicity, stativeness is an abstract concept. It refers to a lack of change and limits instead of the presence of such properties. The abstract nature of states necessitates grammatical testing which can set states apart from the four active situation types. Three tests which evaluate the [+/- stative] status of verbs are given below. The first test looks at progression where only non-states can occur in a progressive form in English. Consider the data in (17).

(17)	Situation Type	Example
a.	State	*Martha is knowing the answer
b.	Activity	Martha is running
c.	Accomplishment	Martha is painting a picture
d.	Achievement	?Martha is reaching the finish line

Both the activity *running* and the accomplishment *painting (the picture)* in (17b-c) are perfectly grammatical in the English progressive formation. The achievement *reaching (the finish line)* has a questionable reading in (17d): the sentence is only acceptable under a play-by-play interpretation.<sup>12</sup> In contrast to the active verbs in (17b-d) the stative situation *knowing (the answer)* in (17a) is unacceptable in the progressive.<sup>13</sup>

In a second test only non-stative verbs which are volitional events are grammatical as a complement of the verb *force* as in (18).

(18)	Situation Type	Example
a.	State	*Martha forced Rick to know the answer
b.	Activity	Martha forced Rick to run
c.	Accomplishment	Martha forced Rick to paint a picture
d.	Achievement	Martha forced Rick to reach the finish line

The three non-stative situations *run* in (18b), *paint (a picture)* in (18c), and *reach the (finish line)* in (18d) are grammatical as complements of *force*. The stative verb in (18a) *know (the answer)* is unacceptable in the same environment because one cannot force a state to occur. Verbs such as *force* are considered to be causative. Frawley (1992:158) explains: ‘events that are causative express some relation of determination between two events, with a prior event resulting in, or giving rise to a subsequent event’. In order for a verb to take a causative complement it requires the participants of the subsequent event to have some degree of volition. That is, the subsequent event must permit subjects

<sup>12</sup>A play by play interpretation involves describing the action as it is happening. This commonly occurs when sportscasters announce sports events.

<sup>13</sup>Certain states are acceptable in the stative construction:

(i) Martha is living in Texas now.

(ii) Martha lives in Texas.

These sentences are noted as exceptions and are not discussed in this thesis.



activity are given and discussed. Second, the same is carried out for the accomplishment situation type. Grammatical tests are given for both members of the typology in order to establish each of them as independent categories.

According to Smith (1991) activities are:

- (20)        -stative  
              +durative  
              -telic

These features produce a definition where activities are durative situations which go on for an indefinite period of time with no inherent goal. For example, the English verbs in (21) are activities.

- (21)        English Examples:                    (cf. (12))  
              run, walk, swim, push, drive

In contrast to the stative situation type which has only one distinguishing feature, two features [+durative] and [-telic] characterize the activity class in relation to the four other verb classes. Activities differ from states in two ways. First, the activity is [-stative] which aligns it with the other active situation types in Smith (1991). Second, activities exhibit a [-telic] feature which means that they do not have an associated outcome or change of state. i.e., activities can be terminated or *stopped* but they cannot *finished*.

The accomplishment situation type is similar to the activity class as demonstrated by Smith's feature representation of the accomplishment class given in (22).

- (22)        -stative  
              +durative  
              +telic

Based on these features, accomplishments are durative situations which go on in time but have a necessary goal. English accomplishments are given in (23).

- (23)        English Examples:                    (cf. (12))  
              paint a picture, make a chair, deliver a sermon, draw a circle

For accomplishment situations the distinguishing features are [+durative] and [+telic] and exhibit both similar and differing properties with activity situations. The activity and accomplishment situation types are very similar in that they are both [+durative]. The main difference between these categories lies in the positive or negative value each category holds for telicity. Accomplishments are [+telic], meaning they inherently specify an endpoint. This is in opposition to activity verbs, which have an arbitrary endpoint, [-telic], and require a terminative complement to indicate their culmination.

Given the descriptive accounts for activities and accomplishments provided above, grammatical tests are also used to support the independent status of both situation types. The most common test used to compare activities with accomplishments is the *in an hour* / *for an hour* test. While accomplishments are grammatical with *in an hour* (*in*-phrase) and *for an hour*, (*for*-phrase) activities are only grammatical with *for an hour*. Consider the sentences in (24).

- (24) a. Martha ran for an hour  
           \*Martha ran in an hour
- b. ?Martha painted a picture for an hour  
           Martha painted a picture in an hour

The *in an hour* / *for an hour* test illustrates the difference between natural and arbitrary endpoints. In order for a verb to be permissible with the *in*-phrase, it must be telic; have a natural endpoint. The *for*-phrase is preferred with verbs that are atelic; have an arbitrary endpoint. Thus, the activity *run* in (24a) is only acceptable with the *for*-phrase because *run* is atelic. Further, the accomplishment *paint (a picture)* is grammatical with both prepositional phrases.

Notice, however, that the *for*-phrase test results receive different entailments for activity and accomplishment verbs. Recall the sentences in (25).



- (25) a. Martha ran for an hour  
b. Martha painted a picture for an hour

The sentence *Martha ran for an hour* in (25a) implies that Martha is performing the activity of running for one hour, after which time she stops running. Critically, there is no implication that the activity reaches a specified endpoint. In contrast, the entailment of the sentence *Martha painted a picture for an hour* in (25b) ensues that Martha performs the activity of painting for an hour, at which time the picture is not complete: Martha painted the picture for an hour at which time she stopped.

The entailments of activities and accomplishments also differ when appearing as the complement of the aspectual verbs *stop* and *finish*, or when modified by the adverb *almost*.

(26) Sentence		Entailment
a. Martha stopped running	=	Martha ran
b. Martha stopped painting a picture	≠	the picture was painted

If *stop* selects an activity the resulting entailment presupposes that the event denoted by the verb did occur. Hence, the sentence *Martha stopped running* implies that Martha performed the activity of running. On the other hand, if *stop* selects an accomplishment the same entailment does not result. If *Martha stopped painting the picture*, it is not necessarily implied that the picture has been painted.

Similarly, when modified by the adverbial *almost* activities and accomplishments have different entailments. Consider the data in (27).

(27) Sentence		Entailment
a. Martha almost ran	=	Martha did not begin running
b. Martha almost painted a picture	=	Martha did not begin painting
	=	Martha did not complete painting

*Almost* can modify either a process or a result (Pustejovsky, 1992). Because the sentence *Martha almost ran* involves an activity (process only) where only the process is modified. This simple process reading results in one possible entailment: Martha did not begin the running event. In contrast, accomplishments can be seen as involving both a process and a result which creates in two possible entailments. First, if *almost* modifies the process portion of the event it is implied by the event that Martha did not begin the painting event. Alternatively, if the result of the event is modified, then the resulting entailment is that Martha almost completed the painting event.

#### 4.2.4.3 Achievements , Accomplishments, and Activities

In the preceding sections grammatical tests for distinguishing three of the possible five situation types were presented. The fourth situation type included in Smith's framework is the achievement. Achievements are described by Smith (1991) as:

- (28)        -stative  
              -durative  
              +telic

Hence, achievements are punctual situations which take place in a specific point in time which have a natural inherent endpoint. English achievements are illustrated in (29).

- (29)        English Examples:            (cf. (12))  
              recognize, spot, find, lose, reach, die

In contrast to the other two non-stative verb categories already outlined, achievement verbs have [-durative] and [+telic] features. Achievements are like accomplishments in that they specify an endpoint. However, they differ from both activities and accomplishments by lacking duration. Pustejovsky (1992) explains that this feature construction defines achievements as a result without the process.

Smith's features for achievement verbs are supported by the results of grammatical tests such as the *in an hour / for an hour* test.

- (30) a. Martha ran for an hour  
       ?Martha painted a picture for an hour  
       \*Martha reached the finish line for an hour
- b. ?Martha ran in an hour  
       Martha painted a picture in an hour  
       Martha reached the finish line in an hour

The *for*- phrase is grammatical with atelic events and is, therefore, acceptable in the sentence *Martha ran for an hour* in (30a) which involves an activity situation.

Contrastively, the *in*- phrase is more acceptable with the telic accomplishment and achievement sentences.

The distinction between accomplishments and achievements lies in the entailments for the *in*- phrase constructions. Consider the data in (31).

(31) Sentence	Entailment
a. Martha almost ran	= Martha did not begin running
b. Martha almost painted a picture	= Martha did not begin running Martha did not complete painting
c. Martha almost reached the finish line	= Martha did not reach the finish line

As established above *almost* can modify either a process or a result. *Almost* modifies the process in the activity situation *Martha almost ran* resulting in one entailment, that Martha did not begin running. In contrast, accomplishments can be seen as involving both a process and a result which creates two possible entailments as in *Martha almost painted a picture* of (31b). First, if *almost* modifies the process portion of the event it is implied by the event that Martha did not begin the painting event. Alternatively, if the result of the event is modified, then the resulting entailment is that Martha almost completed the painting event. With the achievement in (31c), *Martha almost reached the finish line*, only one entailment is possible since achievements represent a result without a process.

Furthermore, terminative complements such as *stop* and *finish* are grammatical with both activities and accomplishments but cannot accommodate achievements. Supporting data is given in (32) and (33).

- (32) a. Martha stopped running  
 b. Martha stopped painting a picture  
 c. \*Martha stopped reaching the finish line

- (33) a. ?Martha finished running  
 b. Martha finished painting a picture  
 c. \*Martha finished reaching the finish line

Unlike both activities and accomplishments, the sentences where *stop* or *finish* select and achievement as in \**Martha stopped reaching the finish line* in (32c), and \**Martha finished reaching the finish line* in (33c) are ungrammatical as complements of terminative modifiers because they lack duration.

#### 4.2.4.5 The Semelfactive

Smith (1991) proposes a fifth situation type, which she labels *semelfactive*. According to Frawley (1991), a semelfactive situation consists of a single act or event. Typical English examples of semelfactive verbs are *flash*, *shoot*, *shrug*, *sneeze*, and *blink*. Saeed (1997:111) points out that in English ‘a clash between a semelfactive verb and a durative adverbial can trigger an iterative [or seriative] interpretation’. An iterative situation consists of a series of repeated events. Saeed provides the following examples.

- (34) a. Fred coughed all night.  
 b. The cursor flashed until the battery ran out.

In (34a) it is assumed that Fred coughed repeatedly throughout the night rather than assuming that he only coughed once and it lasted all night. This effect is created by grammatical means rather than lexical meaning and will be demonstrated for Chipewyan semelfactives as well.

A summary of Smith's (1991) feature representation for the semelfactive situation type is given in (35).

- (35)        -stative  
              -durative  
              -telic

Smith proposes [-durative] and [-telic] as the distinguishing features for the semelfactive verb category. These features result in a definition where semelfactive verbs are punctual situations which have an arbitrary endpoint. Smith further argues that semelfactive verbs possess simultaneous initial and final endpoints. In other words, these verbs do not have an outcome other than the occurrence of the event itself.

Grammatical tests can also be used to separate semelfactive verbs from the other situation types. The *in an hour / for an hour* test provides interesting interpretations for semelfactive verbs. Examine the sentences in (36).

- (36)    a. Martha coughed for an hour  
          b. ??Martha coughed in an hour

The semelfactive sentence with the *for*-phrase *Martha coughed for an hour* in (36a) provides an iterative reading which is similar to the activity situation type. In contrast, the *in*-phrase is ungrammatical with semelfactive verbs. The *in an hour* test is most acceptable with telic events such as accomplishments. Because semelfactives lack duration and telicity, (36b) is considered unacceptable.<sup>15</sup>

Manner adverbials such as *quickly* can modify the onset or the process of an event. For activities and accomplishments manner adverbials are concerned with the timing of the process. Consider the data given in (37).

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<sup>15</sup>Smith (1991: 56) claims that (36b) can only be interpreted as: 'five minutes after something-or-other the event [[Martha] coughed] occurred'.

(37) Sentence	Entailment
a. Martha ran quickly	= Martha's running is quick
b. Martha painted a picture quickly	= Martha's painting is quick

The sentence *Martha quickly ran* implies that the process of running is quick. In contrast to activities and accomplishments, semelfactives result in different readings.

(38) Martha coughed quickly

*Martha coughed quickly* implies that Martha began to cough quickly. It does not refer to the cough itself being quick.

This concludes the discussion of Smith's five situation types and all of the features outlined above are generally considered to be universal (Comrie 1979, Smith 1991, Brinton 1988).

#### 4.2.5 Summary

Although the previous Athabaskan analyses provide a large amount of information from which to draw upon, Smith's (1991) modern approach to verb classification is better suited to the present analysis. According to Smith, verbs can be categorized based on their situation aspects which, in turn, are broken down with binary semantic features. Each situation type has a unique set of binary features with which it is associated. Dowty (1979) and Smith (1991) provide grammatical tests which help establish the binary features a situation exhibits. As shown in chapter five each Chipewyan conjugation pair is associated with one of Smith's situation types. Each correlation is supported with grammatical tests from Dowty and Smith, as described in the preceding subsections.

# CHAPTER 5

## SITUATION TYPES AND CONJUGATION PATTERNS

### IN CHIPEWYAN

Chapter five draws on Smith's (1991) five situation types to explain the morphosemantic distribution of each of the six aspectual conjugation pairs in Chipewyan. These six categories are presented with two criteria in mind: (1) similar conjugation patterns (imperfective, perfective), and (2) similar situation types which are summarized in (1).

(1)

Group	Situation Types	Morphology	
		Imperfective	Perfective
Active			
	activity	Ø-	ghe-
	achievement	ne-	ne-
	accomplishment	Ø-	the-
	semelfactive (seriative)	Ø- Ø-	the- ghe-
Stative			
	stative - attributive	N/A	N/A
	stative - positional	the-	ghe-

Four active categories and two stative categories of verbs arise from a correlation of this nature. This distinction between active and stative verbs is well established in the Athabaskan literature, particularly by Li (1946) and Cook (forthcoming) for Chipewyan. Further in the non-Athabaskan linguistic literature, the primary distinction is also one of dynamicity for many researchers: Vendler (1967), Dowty (1979), Brinton (1988), and Smith (1991).

Using each conjugation pair as a point of departure, the semantic properties of each group are established by drawing on the discussion of Smith's framework from chapter four as well as using the grammatical tests to support each group of verbs. Before the six categories can be outlined and discussed, the grammatical tests as described for English in chapter four require re-evaluation from the perspective of Chipewyan.

## 5.1 CHIPEWYAN GRAMMATICAL TESTS

It was demonstrated earlier that each situation type can be separated from the other categories via grammatical tests. Dowty's (1979) tests are summarized in (2) and Smith's (1991) tests for the additional semelfactive situation type are given in (3).

(2)	Grammatical tests	State	Activity	Accomplishment	Achievement
a.	<i>progressive</i>	No	Yes	Yes	Yes
b.	<i>force/persuade</i>	No	Yes	Yes	?
c.	<i>carefully</i>	No	Yes	Yes	Yes
d.	<i>for an hour</i>	N/A	Yes	Yes	No
e.	<i>in an hour</i>	N/A	?	Yes	Yes
f.	<i>for an hour, spend an hour <math>\phi</math>ing</i>	N/A	Yes	Yes	No
g.	<i>stop</i>	N/A	Yes	Yes	No
h.	<i>finish</i>	N/A	Yes	Yes	No
i.	<i>ambiguity with almost</i>	N/A	No	Yes	No

Yes = sentence is grammatical

No = sentence is ungrammatical

N/A = the test does not apply to verbs of this class



(3)	Grammatical Test	Semelfactive
a.	<i>for an hour</i>	Yes -iterative interpretation
b.	<i>in an hour</i>	No
b.	<i>slowly/quickly</i>	Yes - onset of event

Dowty (1979) and Smith (1991) observe that these tests can accurately place verbs in the appropriate situation type in English. For Chipewyan, however, some of the tests are not applicable. First, the *progressive* test which distinguishes states from non-states is not applicable in Chipewyan because progressive aspect is not productive in Chipewyan as explained in chapter two. Although this discovery is disappointing, the *force* test and the *carefully* test are possible for separating states from non-states where *xásłá* 'made' is an appropriate Chipewyan correspondence.

Second, Smith points out that tests for telicity also prove difficult for Navajo. The contrast between *in an hour* and *for an hour* present in English is not relevant for Navajo. This is also the case in Chipewyan.<sup>1</sup>

- (4)
- |    |  |           |          |              |                 |
|----|--|-----------|----------|--------------|-----------------|
| a. | ɟłagha sarihtł'is  | xan iłtha | ghesjën  |              |                 |
|    | one  | time      | how-long | perf-1-sing  |                 |
|    | 'I sang for an hour' or, 'I sang in an hour'                       |           |          |              |                 |
|    |  |           |          |              |                 |
| b. | ɟłagha sarihtł'is  | xan iłtha | hots'ën  | nestí        | ha              |
|    | one  | time      | how-long | toward place | imp-1-go to bed |
|    | 'I am going to bed for an hour' or, 'I am going to bed in an hour' |           |          |              | Fut             |

Each of the Chipewyan sentences in (4) can have either interpretation: *for an hour* or *in an hour*.<sup>2</sup>

Moreover, according to Midgette (1996) the distinction between *stop* and *finish* is not present in Navajo which also seems to be the case in Chipewyan. In both languages

<sup>1</sup>These translations were provided by a Chipewyan consultant in La Loche, Saskatchewan. Midgette (1996) found similar results in Navajo.

<sup>2</sup>It is necessary to explore the possibility of using Chipewyan tests which are equivalent to the *in an hour* / *for an hour* test. At this time, these tests are not available.

terminatives *kút'á* 'stop' and *anast'e* 'finish' are synonymous. This is illustrated for Chipewyan in (5).

- (5) a. *kút'á hesjën*  
           stop imp-1-sing  
           'I stopped singing'  
           or, 'I finished singing'
- b. *hesjën anast'e*  
           imp-1-sing already-done  
           'I finished singing'  
           or, 'I stopped singing'

In (5) *kút'á hesjën* and *hesjën anast'e* can both be used to mean 'I finished singing' or 'I stopped singing' making it difficult to use these constructions as grammatical tests.

Despite the interpretive differences between English and Chipewyan, these terminative tests are not entirely inappropriate for testing the Chipewyan data. When *stop* and *finish* select achievements, the resulting sentences are both ungrammatical. Therefore, if a Chipewyan speaker cannot use either *stop* or *finish* with a particular verb, it is most likely an achievement.

A third test uses the *almost* modifier which can be used in Chipewyan to determine to what situation type a given verb belongs. Chipewyan examples are provided in (6).

- (6) a. *k'asjene ghesjën* = did not sing  
           almost perf-1-sing  
           'I almost sang'
- b. *k'asjene niṭi* = did not go to bed  
           almost perf-1-go-to-bed  
           'I almost went to bed'
- c. *k'asjene yeh hothiĩtsi* = did not make a house  
           almost house areal-perf-1-make = did not complete making the house  
           'I almost made a house'

The Chipewyan data in (6) has entailments similar to the related English data which was most recently outlined in (33) of chapter four. *Almost* modifies the process of the activity situation *ghesjën* 'I sang' resulting in one entailment where the activity of running was not started. The same entailment results when *almost* modifies an achievement situation as in

*k'asjene nitj* 'I almost went to bed' of (6b). Because achievements do not have duration the process of the situation cannot be modified. Instead, the entailment refers to the result portion of the event rather than the process. In contrast, accomplishments have two resulting entailments. First, if the process is modified, it is implied that the event did not occur. Second, if the result is modified, it is implied that the goal of the event did not occur. This is a significant test because it distinguishes accomplishments from activities and achievements.

In relation to the semelfactive situation type, the *in an hour* and *for an hour* tests are not relevant because the two postpositional phrase equivalents are synonymous in Chipewyan. The *quickly* test is grammatical in Chipewyan; where *jghá* 'quickly' is used.

All of the grammatical tests which are acceptable in Chipewyan are summarized in Table 3 below.

**Table 3: Chipewyan Grammatical Tests**

	Grammatical tests	State	Activity	Accomplishment	Achievement	Semelfactive <sup>3</sup>
a.	<i>force/persuade</i>	No	Yes	Yes	?	N/A
b.	<i>stop</i>	N/A	Yes	Yes	No	N/A
c.	<i>finish</i>	N/A	Yes	Yes	No	N/A
d.	<i>ambiguity with almost quickly</i>	N/A	No	Yes	No	N/A
		N/A	Process	Process	Process	Onset

Yes = sentence is grammatical

No = sentence is ungrammatical

N/A = the test does not apply to verbs of this class

Process = modifies process

Onset = modifies onset

Given these grammatical tests and their relevance in Chipewyan, it is now possible to discuss each conjugation pattern and the corresponding situation types. In the sections below the conjugation patterns are divided into active situations in section 5.2 and stative

<sup>3</sup>Where N/A is used under the semelfactive column, this does not imply that these tests cannot be applied to semelfactive situations, rather it means that they are not applied in this thesis.

situations in section 5.3. Within each subsection, a list of verbs from the particular conjugation pattern are listed and typical paradigms are provided to remind the reader of the phonological properties each pattern exhibits. By using grammatical tests, each group of verbs is correlated with a situation type, and exceptions to each correlation are discussed.

## 5.2 ACTIVE SITUATIONS

The distinction between states and non-states is well established in the Chipewyan literature as in Li (1946) and Cook (forthcoming) who both view this distinction as basic. Active situations are easily accommodated by a framework with situation types because four of the five types describe active situations. In Chipewyan, three conjugation patterns, which are  $\emptyset$ -y,  $\emptyset$ - $\theta$ , and n-n, are used in conjunction with active verbs. These three patterns are distributed across the active verb corpus in such a way that four morphological classes ensue. Three categories of verbs are straightforward, with each class exhibiting one of the three conjugation patterns. A fourth class of verbs can occur with two of the three patterns,  $\emptyset$ -y and  $\emptyset$ - $\theta$ . In the subsections below, each morphological class of verbs is shown to correspond with one (or two) of Smith's situation types.

### 5.2.1 The $\emptyset$ -y Verb Class

Verbs which occur with the  $\emptyset$ - imperfective and *ghe*- perfective conjugation pattern are widespread in the Chipewyan grammar. A list of these verbs from Elford and Elford (in progress) is repeated in (7).

(7)	Imperfective	Gloss	Perfective	Gloss
a.	hesjĕn	'I am singing'	ghesjĕn	'I sang'

b. yałti	'I am talking, praying'	yaghiłti	'I talked, prayed'
c. hestsagh	'I am crying'	ghitsagh	'I cried'
d. shésı̄	'I am eating'	shégheı̄	'I ate'
e. hust'áth	'I am cutting it repeatedly'	ghit'áth	'I cut it repeatedly'
f. hesshúl	'I am blowing it prolonged'	ghishúl	'I blew it prolonged'
g. yásgos	'I am jumping'	yághegos	'I jumped'
h. násthër	'I am staying'	nághidhër	'I stayed'

The verbs from (7a-f) were first provided in (11) of chapter three. To further illustrate this particular conjugation pattern, a prototypical verb paradigm is given in (8).

(8) d-yën 'to sing'

Person/ Number	Imperfective		Perfective	
1s	hesjën	/Ø3-s-d-yën/	ghesjën	/ghe-s-d-yën/
2s	nejën	/Ø3-ne-d-yën/	ghijën	/ghe-ne-d-yën/
3s	hejën	/Ø5-Ø3-d-yën/	ghejën	/Ø5-ghe-d-yën/
1d	híjën	/Ø3-íd-d-yën/	ghíjën	/ghe-íd-d-yën/
2d	hujën	/Ø3-uh-d-yën/	ghujën	/ghe-uh-d-yën/
3d	hehejën	/he-Ø3-d-yën/	heghejën	/he-ghe-d-yën/

As mentioned above, the Ø- imperfective is unmarked aspect in Chipewyan and, hence, prefixal position 3 is phonetically null in the imperfective aspect and is represented as Ø3- in (37). In the perfective paradigm the prefix *ghe-* is also located in position 3.

In this thesis it is postulated that the verbs which appear with the Ø-*y* pattern are correlated with Smith's activity situation type. Recall that Smith assigns activities the following binary distinctions:

- (9)        -stative  
              +durative  
              -telic

The combination of the [+durative] and [-telic] features are the distinguishing factors for activities which is supported by the grammatical tests identified in chapter 4 and section 5.1 above for English and Chipewyan, respectively. Two tests are relevant for the

Chipewyan activity verb which are the *almost* entailment test and the *stop/finish* test.<sup>4</sup>

First, the *almost* test illustrates the distinction between activities and accomplishments in (10).

(10)	Sentence	Entailment
	k'asjene ghesjën almost perf-1-sing 'I almost sang'	= did not sing

To native speakers of Chipewyan, the sentence *k'asjene ghesjën* 'I almost sang' in (10) implies that the activity of singing did not take place. This judgment correlates with the typical interpretation of an activity verb as discussed in section 4.2.4.2: *k'asjene* 'almost' modifies the process of the activity resulting in one entailment where the event was not started. A similar entailment holds for all of the verbs listed in (7) supporting the proposition that verbs from the Ø-γ class are primarily activity verbs.

Second, the *stop/finish* test is used to separate activities from accomplishments in (11) and (12).

- (11) a. \*nesda                      anast'e  
           imp-1-return    finish  
           'I finished returning'  
           or, 'I stopped returning'
- b. \*kút'á nesda  
           stop    imp-1-return  
           'I stopped returning'  
           or, 'I finished returning'
- (12) a. hesjën                      anast'e  
           imp-1-sing    finish  
           'I finished singing'  
           or, 'I stopped singing'

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<sup>4</sup>In the following sections activities will be distinguished from the other classes through a variety of grammatical evaluations.

- b. kút'á hesjēn  
 stop imp-1-sing  
 'I stopped singing'  
 or, 'I finished singing'

When the achievement in (11) is selected by *kút'á* 'stop' and *anast'e* 'finish' both sentences are ungrammatical. In contrast, when the activity *hesjēn* 'I am singing' is selected by either terminative adverbial the result is grammatical. Hence, this test distinguished activities from achievements.

Exceptions to this generalization are apparent in Elford and Elford (in progress). Prior to discussing the exceptions to the Ø-γ morphology, it should be noted that one situation type is considered to be a marginal member of another situation type if it shares two of its three binary features in common. In other words, because all active verbs are [+stative] another shared feature is required in order to have marginal membership.

Many of the inconsistent members of the Ø-γ verb class have natural endpoints in contrast to the prototypical activity event which displays an arbitrary endpoint. Two examples are given in (13).

(13)	Sentence		Entailment
a.	k'asjene ghests'ún almost perf-1-kiss 'I almost kissed him /her	=	did not kiss him/her
b.	k'asjene ghiit'ús almost perf-1-peel(it)	=	did not peel it started to peel it but did not complete it

The verb *ghests'ún* 'I kissed him/her' in (13a) is complicated because it can refer to a 'short' kiss (ex, a peck on the cheek) or a 'long' kiss (ex. kissing a lover). Under both interpretations adding the modifier *k'asjene* 'almost' results in one entailment. That is, the event in (13a) implies the activity of kissing did not begin. If *ghests'ún* 'I kissed him/her' refers to a 'long' kiss is in accordance with the claim that Ø-γ verbs are

activities. This is because the activity of 'long' kissing has duration and lacks an inherent endpoint. When modified by *k'asjene* 'almost' this interpretation implies that the activity of kissing did not occur; the process of the event did not happen. However, assuming the activity of kissing is 'short' the result of the event is what is being modified. This is because a 'short' kiss as an achievement: it lacks duration but has a natural endpoint.<sup>5</sup> The event *ghitr'ús* 'I peeled it' in (11b) violates the suggested correlation outright. This event has a natural endpoint and responds to the *almost* test in a manner similar to accomplishments where two entailments are possible. First, if the process is modified, it is implied that the activity of peeling did not occur. Second, if the result of the event is modified, it is implied that the event was not completed.

Despite these exceptions, the majority of the Ø-γ verbs in the corpus examined respond to the grammaticality tests as typical activity verbs. The exceptions to the Ø-γ verb class, as in (13), are semantically accomplishments which are acceptable as marginal members of the activity verb class because activities and accomplishments share the [+durative] feature in common. However, it is important to recognize that these Ø-γ accomplishments are not the same as prototypical accomplishments, and require further research. The verb *ghests'ún* 'I kissed him/her' is surprising when it refers to a 'short' kiss because achievements only share the [-stative] feature making an achievement an unacceptable marginal member for activities.<sup>6</sup> Surprisingly, no semelfactive exceptions seem to be present in the Ø-γ class. Because activities are [-telic], as are semelfactives, marginal semelfactives would also be expected.

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<sup>5</sup>The suggestion that the 'short' kissing verb is an achievement could be supported by the results of a test where both versions of *ghests'ún* 'I kissed him/her' are complements of terminative modifiers. Unfortunately, this data was not gathered during my field work.

<sup>6</sup>It is possible that the verb *ghests'ún* refers to a long kiss more often than a short kiss, in which case the conjugation pattern is expected. Further research is necessary into this matter.



Take notice that this class of verbs corresponds with Li's *customary* class from (4), in chapter four, and with Kari's *durative* primary aspectual string for his *operative verb theme category* as in (6), in chapter four. The verbs from Li's *customary mode* also occur with the Ø-γ conjugation pattern. Moreover, these verbs tend to consist of durative actions. Kari's *durative* primary aspectual string also occurs with a Ø-γ conjugation pattern in Ahtna and, as his label suggests, these verbs are inherently durative.

### 5.2.2 The n-n Verb Class

The second group of verbs to be discussed consistently use a *ne-* imperfective and *ne-* perfective conjugation pattern. Verbs which occur with this particular conjugation pattern are taken from Elford and Elford (in progress) and are listed once again in (14).

(14)	Imperfective	Gloss	Perfective	Gloss
a.	nínesa / nísa	'I am arriving'	níniya / níya	'I arrived'
b.	nínesda / nísda	I am returning'	nínesja / nísja	'I returned'
c.	nestí	'I am sleeping (going to bed)'	niṭí	'I slept (went to bed)'
d.	nínínest'á	I am bowing'	nínínest'á	'I bowed'
e.	ts'enesthi	'I am waking up'	ts'enidhër	'I woke up'
f.	nesdá	'I am sitting down'	nesdá	'I sat down'
g.	ełk'énéstle	'I am opening (a book)'	ełk'énílá	'I opened (a book)'

Recall from chapter three that each prefix has an individual set of phonological rules. In order to illustrate the set of phonological rules for the verbs from the n-n class a typical paradigm is given in (15).

(15) ní#...d-gha/ya/ghël (gh=y) 'to return' <sup>7</sup>

<sup>7</sup>In many cases where the prefix *ni-* is present, the la Loche dialect merges this prefix with the following prefix. For example *nínesda* 'I am returning' would be pronounced *nínsda*. Unfortunately, this condensed form is less transparent than the form given in (13) and is, therefore, not used for reasons of clarity.

Person/ Number		Imperfective		Perfective
1s	nínesda	/ní-ne-s-d-gha/	nínesja	/ní-ne-s-d-ya/
2s	nín̥da	/ní-ne-ne-d-gha/	nín̥ja	/ní-ne-ne-d-ya/
3s	níneda	/ní-Ø <sub>5</sub> -ne-d-gha/	n̥da	/ní-Ø <sub>5</sub> -ne-(N)-d-ya/
1d	nín̥da	/ní-ne-íd-d-gha/	níd̥l	/ní-ne-íd-d-gh̥l/
2d	nínuhda	/ní-ne-uh-d-gha/	nuhd̥l	/ní-ne-uh-d-gh̥l/
3d	níheneda	/ní-he-ne-d-gha/	hen̥d̥l	/ní-he-ne-(N)-d-gh̥l/

As can be seen in (15), both *ne-* imperfective and *ne-* perfective occur in position 3 of the Chipewyan verb. Their surface realizations are remarkably similar where the primary difference between the phonetic realization of the *ne-* imperfective and the *ne-* perfective is in the third person forms with high tone (see section 3.3.2.3) and in the stem alternation.

Semantically, the n-n verbs have been described in the literature as *momentary*. That is, in relation to the other verbs in the Chipewyan lexicon, these verbs are thought to occur in a moment rather than over an extended period of time. Moreover, the verbs listed above are also considered to have an inherent endpoint. According to this description these verbs are most closely related to the achievement situation type which, according to Smith, has the following feature set:

- (16)        -stative  
               -durative  
               +telic

Achievement verbs act predictably with both the *stop/finish* test and the *almost* test in Chipewyan as explained in section 5.1. First, achievements are ungrammatical as complements of the two terminatives *kút'á* 'stop' and *anast'e* 'finish'. The sentences with n-n morphology in (17) and (18) are modified with these terminative modifiers.

- (17)        a. \*nesda            anast'e  
                  imp-1-return   finish  
                  'I finished returning'  
                  or, 'I stopped returning'

- b. \*kút'á nesda  
 stop imp-1-return  
 'I stopped returning'  
 or, 'I finished returning'
- (18) a. \*nestí anast'e  
 imp-1-go to bed finish  
 'I finished going to bed'  
 or, 'I stopped going to bed'
- b. \*kút'á nestí  
 stop imp-1-go to bed  
 'I stopped going to bed'  
 or, 'I finished going to bed'

When *kút'á* 'stop' and *anast'e* 'finish' select n-n verbs the sentences are ungrammatical.

This suggests that these verbs are both achievements. Further, when the Chipewyan consultants were confronted with the sentences in (17) and (18) all of them independently suggested that the appropriate manner in which to express these actions as 'finished' or 'stopped' was to use perfective aspect rather than a terminative modifier.

- (19) a. nesja  
 perf-1-return  
 'I returned'
- b. niṭi  
 perf-1-go to bed  
 'I went to bed'

By considering the terminative complements to be redundant, the Chipewyan speakers view the n-n verbs as inherently terminative thereby supporting Smith's proposal that achievement verbs are [+telic]. In turn, this evidence also distinguishes the n-n achievements from the Ø-γ activity verbs which are [-telic].

The n-n achievements can also be distinguished from accomplishments: the *k'asjene* 'almost' test sets these two situation types apart. Recall that achievements have only one entailment, and accomplishments have two entailments. Three verbs from the n-n class are modified by *k'asjene* 'almost' in (20).



(22) Sentence	Entailment
<i>k'asjene níníla</i>	= did not set them
almost adv-perf-1-them	= started to set them but did not
'I almost set them'	complete

The sentence *k'asjene níníla* 'I almost set them' has two entailments which is expected for accomplishments, not for achievements. First, *k'asjene* 'almost' can modify the process part of the event, implying the event did not occur. Alternatively, the result can be modified, then the resulting entailment is that I started to search for him but did not finish. Because the two situation types share the [+telic] feature in common, it is not surprising that any semantic exceptions to the n-n class would be accomplishments. Once again, it is important to recognize that these accomplishments are not likely to be prototypical accomplishments; further research is necessary into this matter. Moreover, semelfactive exceptions would also be expected as achievements and semelfactives share the feature [-durative], but none are present in the data used for this thesis.

The second exception from (21b) is *nínesíi/níníla* 'I am setting/set them'. At this time it is suggested that the translation of this verb might not be accurate. The *ní-* 'arriving at a point' prefix occurs with the n-n class of verbs and denotes an achievement-like entailment where a situation occurs instantaneously and has an inherent endpoint. Hence, the meaning of *nínesíi/níníla* is likely to reflect such an entailment.<sup>9</sup>

Despite these exceptions, the evidence points toward a positive correlation between verbs from the n-n class and the achievement situation type. The resulting class of verbs corresponds with Li's *momentaneous* mode and Kari's *momentaneous* primary aspectual string morphologically, although, these classes are somewhat different from n-n verbs on a semantic level. Both Li and Kari refer to their *momentaneous* classes as verbs of

<sup>9</sup>I would like to thank Keren Rice (personal communication) for pointing out the presence of the *ní-* prefix and its significance.

motion. As is evident by verbs such as *yeneʔʔi* 'he is looking at him', this does not always seem to be the case in Chipewyan.<sup>10</sup> It is the case, however, that both Li's and Kari's *momentaneous* verbs and the n-n verbs are all punctual.

### 5.2.3 The Ø-θ Verb Class

The third conjugation pattern utilized in accordance with active verbs is the Ø-θ pattern. A list of verbs which typically occur with this conjugation pattern are re-iterated in (23) from Elford and Elford (in progress).

(23)	Imperfective	Gloss	Perfective	Gloss
a.	náskui	'I am vomiting'	nátheskui	'I vomited'
b.	hesbēs	'I am boiling it'	thiʔbēs	'I boiled it'
c.	nászé	'I am hunting'	nátheszé	'I hunted'
d.	hést'ath	'I am cutting it with a blade'	thit'áth	'I cut it with a blade'
e.	hésshúʔ	'I am blowing it once'	thishúʔ	'I blew it once'
f.	best'ēth	'I am cooking'	thiʔt'e	'I cooked'
g.	nénasdá	'I am patching it'	nénathiʔdá	'I patched it'
h.	yeh hostsi	'I am making a house'	yeh hothiʔtsi	'I made a house'

The verbs from (21a-e) were first provided in (14) of chapter three. A verb paradigm exhibiting the Ø-θ conjugation pattern is given in (24).

(24)	ho...ʔ-tsi/tsi 'to make it (house) <sup>11</sup>			
b.	Person/ Number	Imperfective		Perfective
	1s	hosts	/ho-Ø3-s-ʔ-tsi/	hothiʔtsi /ho-the-s-ʔ-tsi/
	2s	honeʔtsi	/ho-Ø3-ne-ʔ-tsi/	hothiʔtsi /ho-the-ne-ʔ-tsi/
	3s	heʔtsi	/ho-Ø5-Ø3-ʔ-tsi/	hóʔtsi /ho-Ø5-the-ʔ-tsi/
	1d	húʔtsi	/ho-Ø3-íd-ʔ-tsi/	hothiʔtsi /ho-the-íd-ʔ-tsi/
	2d	huʔtsi	/ho-Ø3-uh-ʔ-tsi/	hothuʔtsi /ho-the-uh-ʔ-tsi/
	3d	hoheʔtsi	/ho-he-Ø3-ʔ-tsi/	hohéʔtsi /ho-he-the-ʔ-tsi/

<sup>10</sup>I am not suggesting that this group of verbs does not include a large number of motion verbs; however, it does not seem to exclude non-motion verbs. This issue requires further research.

<sup>11</sup>Cook (personal communication) takes note that if the object of the verb stem *-tsi/tsi* 'to make it' is money then thematic *de-* is used in place of *ho-*.

Verbs from this group all occur with Ø<sub>3</sub>- in the imperfective aspect and *the*- for the perfective aspect in position 3. Recall that the *the*- perfective has opaque surface realizations, particularly in the 3 and 3d forms of the paradigm where *the*- is realized as high tone.

A majority of the verbs from the Ø-θ class are correlated with the accomplishment situation type based on their [+telic] and [-durative] distinguishing features. Prototypical Ø-θ verbs differ from both activity and achievement situation types, as illustrated with grammatical tests below. First, verbs from the Ø-θ class differ from the activity verbs of the Ø-γ class in their value for telicity where the former verbs are [+telic] and the latter verbs are [-telic]. Second, the Ø-θ verbs differ from the n-n achievement verbs in durativity with Ø-θ verbs demonstrating a [+durative] feature and the n-n verbs having a [-durative] feature.

The *k'asjene* 'almost' test is useful setting accomplishments from the other categories. To review, if an event is complex and displays both [+telic] and [+durative] features, two interpretations of that event are possible. This results in ambiguity between an implication where the event began but was not finished, and an interpretation where the event did not even begin. In contrast, events with a negative value of either feature have a single interpretation of that event, where it is assumed that the event did not occur. All three morphological classes of verbs discussed thus far are modified by *k'asjene* 'almost' in (25) where the Ø-θ verb has two entailments suggesting it is an accomplishment.

(25)	Sentence	Entailment
a.	<i>k'asjene yeh hothiɬtsj</i> almost house areal-perf-1-make(it) 'I almost made a house'	= did not make it = started to make it but did not complete
	<i>k'asjene ghesjën</i> almost perf-1-sing 'I almost sang'	= did not sing
c.	<i>k'asjene nida</i> almost perf-1-sit-down 'I almost sat down'	= did not sit down

The  $\emptyset$ - $\theta$  sentence *k'asjene yeh hothiɬtsj* 'I almost made a house' in (25a) has two possible entailments which align the  $\emptyset$ - $\theta$  verbs with the accomplishment situation type. Notice that the  $\emptyset$ - $\gamma$  activity event *k'asjene ghesjën* 'I almost sang' in (25b) and *k'asjene nida* 'I almost sat down' in (25c) each have only one entailment. The *k'asjene* 'almost' test, then, supports the correlation between accomplishments and  $\emptyset$ - $\theta$  verbs.

The grammatical tests discussed above support the correlation between  $\emptyset$ - $\theta$  class verbs and the accomplishment situation type. The features which accomplishment verbs possess are re-iterated in (26).

- (26)        -stative  
              +durative  
              +telic

Accomplishments are complex events, according to Smith, having positive values for both durativity and telicity. This complexity is played out in the grammatical tests where two entailments are possible rather than only one as is the case for activities and achievements.

A larger number of exceptions are found in Elford and Elford (in progress) under the assumption that  $\emptyset$ - $\theta$  verbs are accomplishments, some of which are listed below.



(27)	Imperfective	Gloss	Perfective	Gloss
a.	yushís	'I am whistling'	yuthíshís	'I whistled'
b.	násdlógh	'I am laughing'	náthidlógh	'I laughed'
c.	hústth'í	'I recognize him'	húthiíttth'í	'I recognized him'
d.	háuskan	'I am inviting him'	hótheskan	'I invited him'

The verbs *yushís/yuthíshís* 'I am whistling/whistled' and *násdlógh/náthidlógh* 'I am laughing/laughed' of (27a-b) represent the activity verbs belonging to the Ø-θ morphological class. These verbs exhibit a single entailment when modified by *k'asjene* 'almost'.

(28)	Sentence		Entailment
a.	k'asjene yuthíshí almost perf-1-whistle 'I almost whistled'	=	did not whistle
b.	k'asjene náthidlógh almost adv-perf-1-laugh 'I almost laughed'	=	did not laugh

*K'asjene* 'almost' modifies the processes of the events *k'asjene yuthíshí* 'I almost whistled' and *k'asjene náthidlógh* 'I almost laughed' in (28). These situations can only be interpreted as having not occurred.

The verbs *hústth'í/húthiíttth'í* 'I am recognizing/recognized him' and *háuskan/hótheskan* 'I am inviting/invited him' in (27c-d) represent the exceptional achievement verbs present in the Ø-θ class. As illustrated in (29) these verbs also have only one reading for the *k'asjene* 'almost' test.

(29)	Sentence		Entailment
a.	k'asjene húthiíttth'í almost the-perf-1-recognize (him) 'I almost recognized him'	=	did not recognize him
b.	k'asjene hótheskan almost areal-perf-1-invite (him) 'I almost invited him'	=	did not invite him

When modified by *k'asjene* 'almost', both events have entailments where the event did not occur. That is, the sentence *k'asjene húthiɬtth'í* 'I almost recognized him' in (29a), for example, implies that the activity of recognizing did not happen. For these events the punctual result is modified by *k'asjene* 'almost'.

The achievement exceptions are further distinguished from the accomplishments via the *kút'á* 'stop' and *anast'e* 'finish' tests which are given in (30) and (31).

- (30) a. \**húthiɬtth'í* *anast'e*  
           the-perf-1-recognize (him) finish  
           'I finished recognizing him'  
           or, 'I stopped recognixing him'
- b. \**kút'á* *húthiɬtth'í*  
           stop the-perf-1-recognize (him)  
           'I stopped recognizing him'  
           or, I finished recognizing him'
- (31) a. \**hótheskan* *anast'e*  
           areal-perf-1-invite (him) finish  
           'I finished inviting him'  
           or, 'I stopped inviting him'
- b. \**kút'á* *hótheskan*  
           stop areal-perf-1-invite (him)  
           'I stopped inviting him'  
           or, I finished inviting him'

The situations represented in (30) and (31) are both ungrammatical when selected by *anast'e* 'finish' and *kút'á* 'stop' implying that these situations are achievements.

Both the achievements and activities belong to the  $\emptyset$ - $\theta$  verb class, although, a majority of verbs belonging to this morphological class are accomplishments. It is not surprising that both activities and achievements can be marginal members of the  $\emptyset$ - $\theta$  class because accomplishments are complex verbs. Activities and achievements both share a common feature with the dominating situation type. Activities are similar to accomplishments in



(32)	Example	Underlying Form	Gloss
	<b>Seriative</b>		
a.	neshúł	/ne-ł-yúł/	'you are blowing it'
	<b>Semelfactive</b>		
b.	hışhúł	/é-ne-ł-yúł/	'you are blowing it once'

The verb *neshúł* 'you are blowing it' in (32a) is the basic seriative verb form without any secondary semelfactive morphology. In (32b) *hışhúł* 'you are blowing it once', the semelfactive *é-* prefix is added to the verb resulting in a semelfactive meaning. In the perfective forms for these same verb stems, the *é-* semelfactive prefix is not present which is exemplified in the data found in Elford and Elford (in progress) in (33).

(33)	Perfective	Gloss	Imperfective	Gloss
a.	thit'áth [the-i-Ø <sub>2</sub> -t'áth]	'I cut it once'	ghit'áth [ghe-i-Ø <sub>2</sub> -t'áth]	'I cut it repeatedly'
b.	thishúł [the-i-Ø <sub>2</sub> -shúł]	'I blew it once'	ghishúł [ghe-i-Ø <sub>2</sub> -shúł]	'I blew it prolonged'
c.	thiłk'éth [the-Ø <sub>2</sub> -ł-k'éth]	'I shot it once with a gun'	hughiłk'éth [hu-ghe-Ø <sub>2</sub> -ł-k'éth]	'I shot it repeatedly'

Despite the lack of semelfactive prefix *é-*, notice that the *Ø-γ* verbs denote an iterative or repeated event while the *Ø-θ* verbs are semelfactive. Moreover, it is not clear which, if either, of the two inflectional patterns is unmarked for this class of verbs. There are two ways in which to incorporate these data into the present analyses where the first option seems more likely than the second. First, Smith's fifth situation type, the semelfactive, can be adopted. Second, these verbs can be viewed as being marginal members of two classes of verbs: the *Ø-θ* accomplishment class and the *Ø-γ* activity class. Both options are addressed in the paragraphs below.

The first option is to consider the semelfactive verbs as basic and include this morphological set of verbs under the semelfactive situation type described by Smith (1991) who postulates the binary features in (34) for semelfactive verbs.

- (34) -stative  
 -durative  
 -telic

Two series of grammatical tests set semelfactive verbs apart from the other active verbs and these are the *in an hour/for an hour* test and the *quickly* test. The former test, as explained earlier, is not relevant for Chipewyan because the terms *in an hour* and *for an hour* are synonymous. The *quickly* test is possible in Chipewyan where these manner adverbials refer to the onset of semelfactive events. This interpretation contrasts with other active verbs where the manner adverbial refers to the process of the event. For example, *Martha quickly ran* implies that the activity of running is quick rather than the onset of the activity. These data are supported by the *ighq̃* ‘quickly’ test in Chipewyan as illustrated in (35).

(35)	Sentence		Entailment
a.	<i>ighq̃ thishúł</i> quickly perf-1-blew (it) ‘I quickly blew it (once)’	=	<i>ighq̃</i> refers to the onset of the event
b.	<i>ighq̃ thíłk’éth</i> quickly perf-1-blew (it) ‘I quickly shot it (once)’	=	<i>ighq̃</i> refers to the onset of the event

In *ighq̃ thishúł* ‘I quickly blew it once’ of (35a) and *ighq̃ thíłk’éth* ‘I quickly shot it once’ of (35b) the addition of the manner adverbial implies that the speed of the onset of the action changes rather than the speed of the event itself. That is, *ighq̃ thishúł* ‘I quickly blew it once’ (35a) implies that the initiation of the blowing activity occurs quickly. Contrastively, the Ø-γ counterparts of these semelfactive verbs do not have the same interpretation as the situations with the Ø-θ conjugation pattern just described. This is demonstrated in (36).

(36)	Sentence		Entailment
a.	<i>ighq̄ ghishúł</i> quickly perf-1-blew (it) 'I quickly blew it (repeatedly)'	=	<i>ighq̄</i> refers to the process of the event
b.	<i>ighq̄ hughĩk'éth</i> quickly th-perf-1-shot (it) 'I quickly shot it (repeatedly)'	=	<i>ighq̄</i> refers to the process of the event

The sentence *ighq̄ ghishúł* 'I quickly blew it repeatedly' in (346), for example, implies that the process of blowing repeatedly occurs quickly. That is, the activity of blowing occurs quickly, not the initiation of the blowing activity.

The grammatical tests in (35) and (36) support the argument that these Ø-θ verbs are semelfactive. Under an assumption that the semelfactive is a situation type, the seriative Ø-γ verbs must be considered marked. In other words, these verbs are inherently semelfactive and become seriative through the inflection of the Ø-γ conjugation pattern. In this case it is problematic to consider one verb form to be unmarked or more basic because speakers of Chipewyan do not consider one form to be more or less basic than the other.<sup>12</sup> On the other hand, the semelfactive situation type is supported by Smith who proposes that a large variety of languages exhibit a separate class of semelfactive verbs. Further support is drawn from Kari (1979) who also takes note of this class of verbs in Ahtna which he labels the *successive* verb theme category.<sup>13</sup>

The alternative possibility is to consider these Ø-θ and Ø-γ verbs to be marginal members of two prototypical situation types. Recall that Smith (1991) refers to phenomena of this nature within prototype theory where she suggests that it is possible to

<sup>12</sup>It is difficult to say whether or not the native speakers of a language have the ability to judge marked versus unmarked verb forms. My Chipewyan consultants believe that neither the Ø-θ or Ø-γ verb is marked.

<sup>13</sup>Kari (1979) argues that the Ø-γ pattern is basic and the Ø-θ pattern is secondary; however he presents little support for this argument.

have marginal members of a class which only possess a subset of the common properties of that class. Possibly, these verbs are marginal members of two groups of verbs where the *the*-perfective verbs are associated with the Ø-θ accomplishment verbs, and the *ghe*-perfective verbs are associated with the Ø-γ activity verbs. Under this assumption, the seriative Ø-γ verbs are easily accommodated because they are [+durative], due to their repetitive nature, which is one of the predominant features exhibited by the Ø-γ activity situation type. Semelfactive Ø-θ verbs are not as clear as their seriative Ø-γ counterparts because, according to Smith (1991), semelfactive verbs are [-durative] and [-telic] in contrast to typical accomplishment verbs which are [+durative] and [+telic]. Either these particular Ø-θ verbs are not marginal members of the typical Ø-θ accomplishment verb class, or the binary features for semelfactive verbs need to be re-examined.

Theoretically, this group of verbs likely comprises a semelfactive situation type. Saeed (1997) argues for a semelfactive situation type in English. Further, he explains that a semelfactive verb can have an iterative interpretation when it is modified by a durative adverbial in English. The use of the Ø-γ pattern in Chipewyan also results in an iterative reading of a semelfactive verb; in which case the semelfactive form is unmarked.<sup>14</sup> The primary issue resulting from an approach where a semelfactive situation type is present is related to homophony in the Athabaskan languages. Having a Ø-θ semelfactive situation type creates three distinct semantic classes which use θ as a distinct morphological prefix. This issue is briefly discussed in chapter six.

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<sup>14</sup>With further research it would be possible to determine which class, if either, is basic. This could be achieved by asking a number of questions. First, do all verbs in this class have both semelfactive and iterative versions? Second, so some verbs have irregular meanings in one pattern or the other?

### 5.3 STATIVE SITUATIONS

In the literature surrounding stative situations, often only one class of states is required by languages such as English (Vendler 1967, Dowty 1979, Smith 1991). Based on the morphological aspect division made in Chipewyan two stative classes are required where the first class is closely related to English adjectives and the second class is primarily comprised of position states. In this thesis, less attention is devoted to states where the two classes are only briefly analyzed. A detailed discussion of the requirement for two stative situation types is left for further research.

#### 5.3.1 The N/A Verb Class

The N/A verb class is the first of two stative classes of verbs in this analysis. The most salient property of this verb class in Chipewyan is that it lacks the same type of inflectional morphology present with the other verb classes. While these verbs are inflected for person and number, the inchoative aspect (discussed in chapter three, reiterated below), and the  $\emptyset$ - imperfective, none of the three perfective prefixes in Chipewyan may co-occur with these verbs. Examine the paradigm in (37).

(37) ne... $\emptyset$ -zq' to be good'

b.	Person/ Number	Imperfective	*Perfective <sup>15</sup>	
	1s	neszq	/ne- $\emptyset$ 3-s- $\emptyset$ 2-zq/	*neghizq /ne-ghe-i- $\emptyset$ 2-zq/
	2s	nizq	/ne- $\emptyset$ 3-ne- $\emptyset$ 2-zq/	*neghizq /ne-ghe-ne- $\emptyset$ 2-zq/
	3s	nezq	/ $\emptyset$ 5-ne- $\emptyset$ 3- $\emptyset$ 2-zq/	*neghezq / $\emptyset$ 5-ne-ghe- $\emptyset$ 2-zq/
	1d	nídzq	/ne- $\emptyset$ 3-íd- $\emptyset$ 2-zq/	*neghídzq /ne-ghe-íd- $\emptyset$ 2-zq/
	2d	nuhzq	/ne- $\emptyset$ 3-uh- $\emptyset$ 2-zq/	*neghuhzq /ne-ghe-uh- $\emptyset$ 2-zq/
	3d	henezq	/he-ne- $\emptyset$ 3- $\emptyset$ 2-zq/	*heneghezq /he-ne-ghe- $\emptyset$ 2-zq/

From (37) it is demonstrated that only an imperfective paradigm can be applied to these descriptive verbs . Because these verbs are only ever zero marked, it is logical to suggest

<sup>15</sup>The *ghe*- perfective is exemplified in (35) because it is the most likely candidate as the perfective used by stative verbs because the *ghe*- perfective is used by the other stative class. Both the *ne*- perfective and the *the*- perfective are also ungrammatical with adjectival verbs.



that these verbs are set apart from the others due to their different morphological properties.

A list of some of the verbs from this class are provided in (38).

- |      |           |                |
|------|-----------|----------------|
| (38) | a. nezq   | 'it is good'   |
|      | b. degóth | 'it is new'    |
|      | c. nedáth | 'it is heavy'  |
|      | d. delgai | 'it is white'  |
|      | e. nátsēr | 'it is strong' |
|      | f. delzēn | 'it is black'  |

These adjectival verbs are somewhat difficult to support as a situation type with grammatical tests due to the English bias many of these tests demonstrate.<sup>16</sup> However, these verbs exhibit other morphological properties which set them apart from the other morphosemantic categories already provided. In addition to the lack of perfective morphology, these verbs often exhibit the thematic prefixes *de-* and *ne-* which, as mentioned in section 2.2.5 of chapter two, are vestiges of a Proto-Athabaskan gender system. The examples from chapter three are repeated below in (39).

- |      |           |               |        |               |
|------|-----------|---------------|--------|---------------|
| (39) | a. dēlgai | 'it is white' | dēlzēn | 'it is black' |
|      | degóth    | 'it is new'   | detan  | 'it is thick' |
|      | b. nezq   | 'it is good'  | nechá  | 'it is big'   |

As acknowledged in chapter two, Cook (forthcoming) claims that *de-* is used with verbs that refer to texture, consistency, colour and surface shape. In contrast, *ne-* is believed to occur with verbs describing more abstract qualities.

Further, some of the verbs in the N/A stative class, particularly the colour terms, take a transitional prefix which is more commonly referred to as inchoative in the

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<sup>16</sup>I found it difficult to elicit ungrammatical data from my consultants because they did not like to give me sentences that were incorrect.

mainstream linguistic literature. Examples of the inchoative prefix are given in (40).

- (40) a. delgai 'it is white' dígái 'it has turned white'  
 a. delzēn 'it is black' dídzí 'it has turned black'

As can be seen, the vowel quality and tone are altered to mark the inchoative aspect of these verbs in Chipewyan resulting in an active verb form. That is *delgai* 'it is white' becomes *dígái* resulting in the inchoative form 'it has turned white'.

This class of adjectival verbs correspond with Kari's *neuter* primary aspectual string which includes both *descriptive* and *dimensional* verb theme categories. Li does not discuss these verbs to a significant extent but they would be considered a part of his *neuter mode*.

### 5.3.2 The 0-γ Verb Class

The final group of verbs being examined comprises verbs which occur with *the-* in the imperfective and *ghe-* in the perfective aspect. A list of verbs which exhibit this morphological pattern is given in (41), and was found in Elford and Elford (in progress).

(41)	Imperfective	Gloss	Perfective	Gloss
a.	thit̥i	'I am in sleeping position'	ghit̥i	'I was in sleeping position'
b.	thiy̥i	'I am standing'	ghiy̥i	'I stood'
c.	thida	'I am in sitting position'	ghidá	'I was in sitting position'
d.	k'athida	'I am sitting and waiting'	k'aghidá	'I sat and waited'
e.	thek'á	'it is cold'	ghek'á	'it was cold'

A typical paradigm for  $\theta$ -y verbs is illustrated in (42).

(42)  $\emptyset$ -da/ke 'to be in sitting position'

Person/ Number		Imperfective		Perfective
1s	thida	/the-i- $\emptyset_2$ -da/	ghidá	/ghe-i- $\emptyset_2$ -dá/
2s	thida	/the-ne- $\emptyset_2$ -da/	ghidá	/ghe-ne- $\emptyset_2$ -dá/
3s	theda	/ $\emptyset_5$ -the- $\emptyset_2$ -da/	ghidá	/ $\emptyset_5$ -ghe-(N)- $\emptyset_2$ -dá/
1d	thike	/the-íd- $\emptyset_2$ -ke/	ghíké	/ghe-íd- $\emptyset_2$ -ké/
2d	thuhke	/the-uh- $\emptyset_2$ -ke/	ghuhké	/ghe-uh- $\emptyset_2$ -ké/
3d	heke	/he-the- $\emptyset_2$ -ke/	heghíké	/he-ghe-(N)- $\emptyset_2$ -ké/

*The-* imperfective and *ghe-* perfective are located in position 3 of the Chipewyan verb.

The *the-* imperfective is morphophonologically similar to the *the-* perfective where *the-* deletes in the third person forms.<sup>17</sup> The *ghe-* perfective for stative verbs is the same morphophonologically as it is in the active forms.

Despite the morphological uniformity of the  $\theta$ -y verb class, defining this stative class of verbs in detailed semantic terms is not a simple task. Attempts have been made to classify these stative verbs in more detail (see Kari 1979, Rice 1989) but without clearly defined verb classes the status of individual stative verbs is difficult to determine. Very few distinctions within the stative verb class have been established in the general linguistic literature. Dowty (1979), for example, lists the possible types of stative verbs for English but does not provide grammatical tests to distinguish between the various types of verbal states. In a broad sense, the stative properties of these verbs are supported with the Chipewyan version of the *xásłá* 'made' test which can be used to modify active verbs but not stative verbs as is illustrated in (43).

<sup>17</sup>Notice in the 3d form of the verb *héke* 'they are in sitting position' in (40), that the *the-* imperfective cannot delete due to syllabic constraints. A verb requires two syllables, therefore, the *the-* prefix cannot be deleted.

(43)	Sentence	Gloss
a.	ghejën      xásłá perf-3s-sing   perf-1-make	'I made him sing'
b.	hółtsj      xásłá areal-perf-3s-make (it)   perf-1-make	'I made him make it'
c.	néda      xásłá perf-3s-sit-down   perf-1-make	'I made him sit down'
d.	*ghijj      xásłá perf-3s-stand   perf-1-make	'I made him be in standing position'
e.	*ghijtj      xásłá perf-3s-sleep   perf-1-make	'I made him be in lying down position (sleep)'

In contrast to the active verbs in (43a-c), the sentences \**ghijj xásłá* 'I made him be in standing position as in (43d), and \**ghijtj xásłá* 'I made him sleep' in (43e) from the  $\theta$ - $\gamma$  verb class are not grammatical as complements of *xásłá* 'made'. This supports the proposal that the  $\theta$ - $\gamma$  verbs are stative. This group of verbs corresponds to Li's neuter mode and to Kari's *stative*, *positional* and *classificatory* verb themes which all occur with the *neuter* primary aspectual string.

## 5.4 SUMMARY

Overall, a pattern results from correlating aspectual conjugation patterns with situation types in Chipewyan. The summary of this pattern is re-iterated in (44).

(44)) Proposed Correlation

Group	Situation Types	Prefix Morphology	
		Imperfective	Perfective
Active			
	activity	Ø-	ghe-
	achievement	ne-	ne-
	accomplishment	Ø-	the-
	semelfactive (seriative)	Ø- Ø-	the- ghe-
Stative			
	stative - attributive	N/A	N/A
	stative - positional	the-	ghe-

First, the Ø-γ class of verbs are adequately represented by the features associated with the activity situation type. These are acceptable marginal members because both situation types are [+durative], differing only in telicity. The Ø-γ activity class also includes verbs such as *ghests' ūn* 'I kissed him/her' which can be interpreted as activities or achievements. The latter situation type is not acceptable as a marginal member of the Ø-γ activity class because achievements are [-durative] and [+telic] opposing activities which are [+durative] and [-telic]. These achievement verbs are problematic under the current analysis.

Second, the n-n class is associated with the achievement situation type.

Accomplishments are common exceptions to the n-n achievement class. That is, the exceptional situations with n-n morphology still have a natural endpoint but they occur

over a sustained period of time rather than in an instant. Accomplishments are acceptable as marginal members of the n-n achievement class because both types are [+telic] differing only in durativity. As pointed out an accurate definition of the verb *nínesí/nínila* 'I am setting/set them', which would be an accomplishment in English, is unclear at this time. It is suggested that a more precise translation is required due to the presence of the *ní-* prefix which commonly occurs with achievement verbs.

Third, the Ø-θ class is associated with the accomplishment situation type in Chipewyan. A large number of exceptions are present in this morphological group of verbs which is not surprising considering the complexity of the accomplishment situation type. Because accomplishments have positive features for both durativity and telicity more variation is possible. Activities and achievements are expected as marginal members of the accomplishments situation type, and in Chipewyan both alternatives are present as marginal members. Activities such as *náthidlógh* 'I laughed' in (27d) and achievements such as *húthiíthh'í* 'I recognized him' in (27a) use the Ø-θ conjugation pattern.

The fourth category of verbs uses both Ø-θ and Ø-γ patterns. It is unclear whether these verbs represent a separate class of verbs housed under Smith's semelfactive situation type, or whether they are marginal members of both the Ø-θ accomplishment class and the Ø-γ activity class. As explained in section 4.2.4, the presence of a semelfactive situation type is the more likely choice. Unfortunately, it creates yet another homophonous *the-* prefix which is associated with entirely different semantic features than the other two *the-* prefixes discussed in this chapter. This problem is re-addressed from a more general perspective in chapter six.

Lastly, stative verbs are not as well defined under a framework involving situation types: only one of the five types accounts for stative verbs. However, two morphological patterns are correlated with the stative situation type in Chipewyan. Regarding the N/A adjectival class of verbs, it seems reasonable to extend Dowty's analysis of English adjectives to Chipewyan, but the necessary empirical evidence to support this claim has not been gathered at this time. Despite this lack of formal support, Dowty (1979) acknowledges that English adjectives are included under the stative situation type. Further, this class of verbs is distinguished from the other groups according to a number of unique morphological processes which include the *de-* and *ne-* thematic prefixes as well as the inchoative morphology. The  $\theta$ - $\gamma$  stative class is also present in Chipewyan. Again, a detailed semantic analysis is not possible for states in a situation type framework; however, the  $\theta$ - $\gamma$  stative class is supported by the *xásłá* 'made' test where active verbs are permissible with *xásłá* 'made' and stative verbs are not. Exceptions to the stative verb classes were not found.

Overall, the six verb categories support a correlation between morphological conjugation pairs and Smith's (1991) five situation types. Because each group of verbs has exceptions to the postulated correlation, it is maintained that situation types are organized around prototypes rather than exhibiting clearly defined boundaries.

In the concluding chapter, a number of problematic issues surrounding the current analysis are discussed. These include methodological problems as well as the difficulties surrounding a lack of one-to-one mapping of morphological and semantic properties. Further, the status of verbs in comparison to situations is also touched upon in chapter six. Chapter six concludes by placing the results of this analysis within a broader context and provides areas for further research.

## CHAPTER 6

### CONCLUSION

#### 6.1 A REVIEW

The goal of this thesis has been to correlate inflectional conjugation patterns (imperfective and perfective) and universal situation types in Chipewyan. Motivation for such an analysis stems from the restricted distribution of the inflectional conjugation pattern in contrast to the unrestricted distribution of the only mode prefix in Chipewyan: all of these prefixes are located in the same position in the verb template. In other words, each conjugation pattern is mutually exclusive, being restricted to a set of verbs exhibiting a particular set of semantic characteristics while the mode prefix lacks such restrictions.

Prior to understanding this correlation it was necessary to lay a basic foundation which included an outline of the general phonological and morphosyntactic characteristics of Chipewyan. Because the verb was the primary focus of this thesis, further morphophonological rules of the verb and the identification of a variety of verbal prefixes were addressed in chapter two. Given the necessary structural information, the individual imperfective and perfective aspect prefixes and the patterns in which they occur were identified and discussed in chapter three. Also, the motivation behind the present analysis was provided at this time, establishing the restricted distributions of the conjugation patterns across the Chipewyan verb corpus. The differing distributions of inflectional aspect and mode have not been discussed in the Athabaskan literature, but some related analyses have been performed by Li (1946), Kari (1979), and Rice (1989), which examine the relationship between derivational morphology and semantic



characteristics. Chapter four began by discussing these three proposals focusing on their interpretations of the relationship between morphology and semantics. Although these analyses contribute to the present investigation, they do not address the properties of Athabaskan languages in a framework recognized crosslinguistically, nor do they concern themselves with the relationship between inflectional morphology and semantic characteristics. Smith (1991), like the other Athabaskanists discussed, is strictly concerned with derivational morphology which she contrasts with the concepts of imperfective, perfective and neutral viewpoints; however, she is not concerned with the inflectional morphology related to these viewpoints. In order to analyze a variety of languages, Smith provides a crosslinguistic approach which organizes verbs semantically based on five universal situation types which are activities, accomplishments, achievements, semelfactives, and states. In chapter five, Smith's situation types were adopted and applied to the restricted distribution of the conjugation patterns in Chipewyan resulting in the organization re-iterated in (1).

(1)

Group	Situation Types	Morphology	
		Imperfective	Perfective
Active			
	activity	Ø-	ghe-
	achievement	ne-	ne-
	accomplishment	Ø-	the-
	semelfactive (seriative)	Ø- Ø-	the- ghe-
Stative			
	stative - attributive	N/A	N/A
	stative - positional	the-	ghe-



individual verbs, the present analysis suggests that the accurate correlation is between inflectional prefixes and situation types. One reason for this choice is that the distribution of the Chipewyan conjugation patterns across the verb corpus appears to be systematic, as explained in chapter three. If the inflectional prefixes were associated with individual verbs a systematic distribution is not necessarily expected. By assuming that the inflectional prefixes are associated with situations such systematicity is expected. Further, if the morphological classes are indeed corresponding to situation types, then a change in situation type should be represented by a change in the aspect morphology. This prediction is most strongly supported by the  $\emptyset$ - $\theta$ / $\emptyset$ - $\gamma$  verbs which correspond to Smith's semelfactive situation type. Recall that these verbs can occur with the  $\emptyset$ - $\theta$  morphology to portray a semelfactive situation as in *thishúł* 'I blew it once', and can also occur with the  $\emptyset$ - $\gamma$  morphology to denote an iterative situation as in *ghishúł* 'I blew it repeatedly'.

To further support a correlation between conjugation patterns and situation types, the present analysis has been concerned with verbs and their arguments where both intransitive and transitive verbs are present in the data; however, the situation structures available in the Chipewyan dictionary are limited to some extent. Only one form, transitive or intransitive, is available for many of the verbs presented in the Chipewyan dictionary limiting the present analysis to the basic form of each verb. Moreover, when a verb is present in both transitive and intransitive forms in the dictionary it is still difficult to decipher whether these forms correspond with the present analysis. Current assumptions predict that the inflectional morphology on the verb should alter if the situation structure alters. Given this assumption, if direct object morphology is added to a previously intransitive verb form, thereby altering the situation structure, the inflectional aspect morphology should change to match the altered situation type. These



this process would be to examine the relationship between verb internal adverbials and conjugation patterns. Another area of research worth pursuing is the interaction between stem alternation, aspect, and, mode in relation to situation aspect. Studying these relationships in Chipewyan may reveal more about situation aspect and its effects on more complex verb forms.

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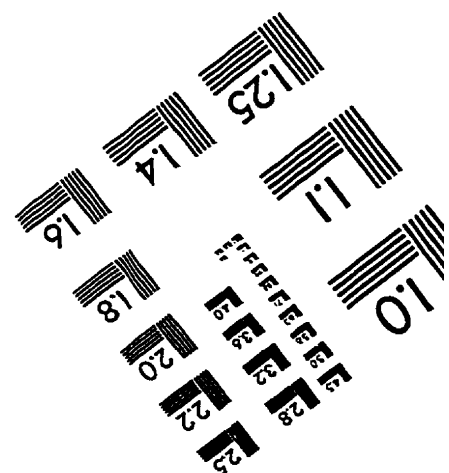
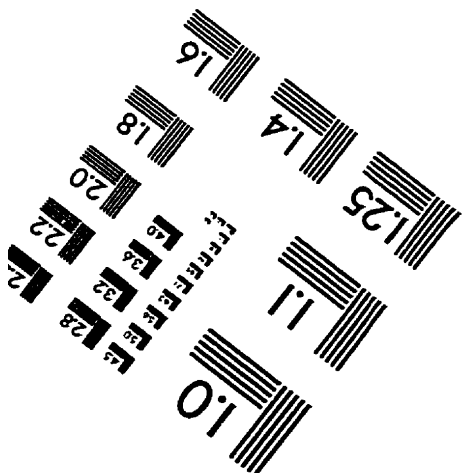
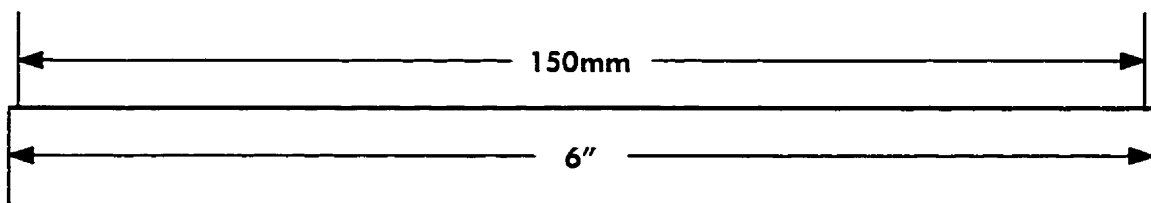
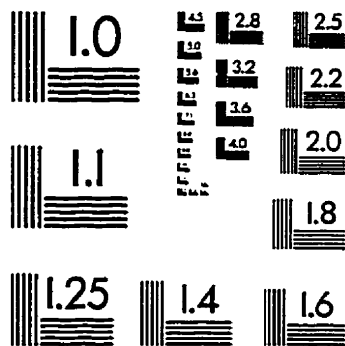
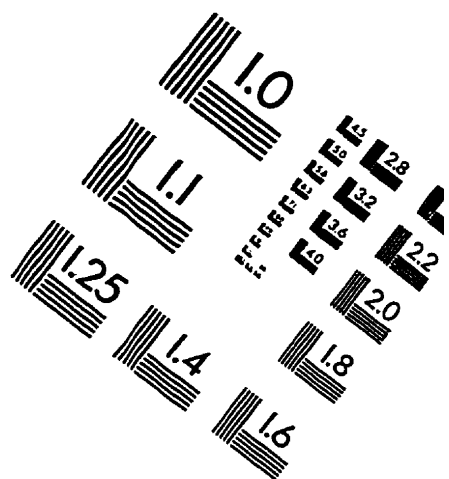
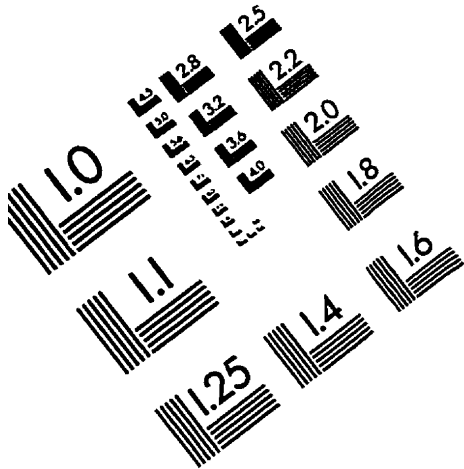
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