

UNIVERSITY OF CALIFORNIA

Los Angeles

Ergativity

in

Coast Tsimshian (Sm'algyax)

A dissertation submitted in partial satisfaction of the
requirements of the degree Doctor of Philosophy
in Linguistics

by

Jean Gail Mulder

1988

A microfilm or xerographic print of this
dissertation may be purchased from
University Microfilms International
300 North Zeeb Road
Ann Arbor, Michigan 48106

© Copyright by
Jean Gail Mulder
1988

LD
791.9
L6M866

The dissertation of Jean Gail Mulder is approved.


Paul Kroskrity


Pamela Munro, Committee Co-Chair


Sandra Thompson, Committee Co-Chair

University of California, Los Angeles

1988

to Cam

TABLE OF CONTENTS

Acknowledgements	vi
Vita	vii
Abstract of the Dissertation	ix
Introduction	1
Chapter 1. Coast Tsimshian: The Language and Its Speakers	5
1.1 Introduction	5
1.2 An Overview of Coast Tsimshian Phonology	10
1.3 Coast Tsimshian Language Scholarship	18
1.3.1 Early Word Lists	19
1.3.2 Missionary Translations	20
1.3.3 Linguistic Studies	22
1.3.4 Educational Materials	29
1.4 Orthographic Considerations	31
Notes	37
Chapter 2. Morphological Ergativity	40
2.1 Introduction	40
2.2 Connectives	43
2.2.1 Introduction	43
2.2.2 Predicative Connectives	46
2.2.2.1 Full System	47
2.2.2.2 Reduced System	56
2.2.3 Possessive Connectives	64
2.2.4 Prepositional Connectives	67
2.3 Personal Pronouns	71
2.3.1 Dependent Pronouns	73
2.3.2 Possessive Pronouns	89
2.3.3 Independent Pronouns	93
2.4 Person Agreement	96
2.5 Number Agreement	104
2.6 Tense/Aspect of the Clause	109
2.6.1 Tense/Aspect System	111
2.6.2 Conditioning Factor in Ergativity	116
2.7 Mood of the Clause	125
2.7.1 Introduction	125
2.7.2 Irrealis Mood	126
2.7.3 Indicative and Subjunctive Moods	129
2.7.3.1 Sentence-Initial Conjunctions and Negatives	130
2.7.3.2 Conditioning Factor in Ergativity	133
2.8 Verbal Morphology	138
2.8.1 Preverbal Particles	139
2.8.2 Suffixes	144
2.8.3 Noun Incorporation	152
2.9 Summary	156
Notes	161

Chapter 3. Syntactic Ergativity	168
3.1 Introduction	168
3.2 Imperatives	170
3.3 Jussive Complements	175
3.4 'Want' and Similar Verbs	179
3.5 Causatives	184
3.6 Reflexives	188
3.7 Coordination	191
3.8 Subordination	196
3.9 Topicalization	200
3.10 Relativization	208
3.11 The Lack of a Passive or an Antipassive	213
3.12 Summary	217
Notes	219
Chapter 4. The Coast Tsimshian Problem: From a Cross-Linguistic Perspective	221
4.1 Introduction	221
4.2 Morphological Ergativity	221
4.3 Syntactic Ergativity	232
4.4 Summary	239
Notes	242
Epilogue: The Coast Tsimshian Speech Community Since 1830	243
1. Introduction	243
2. A Brief Demographic History	244
3. A Historical Perspective on the Use of Coast Tsimshian	251
3.1 Non-Educational Factors in the Decline of Coast Tsimshian	251
3.2 The Historical Role of Coast Tsimshian in Education	256
3.3 Factors in Establishing a Sm'algyax Language Program	261
4. The School and Language Revival	268
4.1 Program Objectives	268
4.2 The Role of the School	270
References	274

ACKNOWLEDGEMENTS

I wish to thank the people of Hartley Bay, B.C., Kitkatla, B.C., Lax Kw'alaams, B.C., and Metlakatla, B.C., for their continued support of linguistic research in their communities. Special thanks go to John and Helen Clifton, Ernie and Lynne Hill, the late Violet Robinson, and Mildred Wilson (Hartley Bay); Priscilla Bolton, Marjorie Brown, and Beatrice Robinson (Kitkatla); Pauline Dudoward, Rita Hayward, Verna Helin, Marion Musgrave and Doreen Robinson (Lax Kw'alaams); and Sylvia Leighton (Metlakatla, B.C.) who all generously shared their knowledge and insights.

The fieldwork on which this study is based was supported through grants from the UCLA American Indian Studies Center, the Whatcom Museum of History and Art, Bellingham, Washington, and the UCLA Chancellor's Patent Fund.

VITA

September 29, 1954	born, Niskayuna, New York
1972 - 1975	B.A. in Mathematics and Linguistics University of California, Santa Bar- bara
1975 - 1976	Graduate work in Linguistics, Univer- sity of California, San Diego
1976	Teaching Assistant, Linguistics, UCSD
1976 - 1978	M.A. in Linguistics, University of Cal- ifornia, Los Angeles
1977 - 1979	Teaching Assistant, Linguistics, UCLA
1978 - 1979	C.Ph.D. in Linguistics, UCLA
1979 - 1981	Fieldwork on Coast Tsimshian in Alaska and British Columbia
1981 - 1984	Linguist, Sm'algyax Language Studies Program, British Columbia School Dis- trict No. 52 (Prince Rupert, B.C.)
1982 - 1984	Lecturer and Coordinator, Native In- dian Language Diploma Program (Prince Rupert, B.C.), Linguistics and Educa- tion Departments, University of Vic- toria, British Columbia
1982 - 1983	Lecturer, Native Teacher Training Pro- gram (Prince Rupert, B.C.), Education Department, Simon Fraser University, British Columbia
1983 - 1984	Lecturer, Native Teacher Training Pro- gram (Hazelton, B.C.), Linguistics and Education Departments, University of Victoria
1985 - 1986	Visiting Researcher, Boreal Institute of Northern Studies, University of Al- berta
1986 - 1987	Lecturer, Anthropology Department, Uni- versity of Alberta

- | | |
|-------------|---|
| 1987 - 1988 | Lecturer, Linguistics Department, University of Alberta |
| 1987 - 1988 | Linguistics Consultant, School of Native Studies, University of Alberta |

PUBLICATIONS

- Mulder, J. 1976. Raising in Turkish. *Proceedings of the Berkeley Linguistic Society*, 2.298-307.
- Mulder, J. 1978. Universal Grammar and Diachronic Syntax: The Case of the Finnish Negative, M.A. Thesis, UCLA.
- Mulder, J. 1980. The Tsimshian English Dialect: The Result of Language Interference. *Working Papers of the 15th Annual International Conference on Salish and Neighboring Languages*.
- Mulder, J. and A. Schwartz. 1981. On the Subject of Advancements in the Philippine Languages. *Studies in Language*, 5.227-68.
- Mulder, J. 1982. The Tsimshian English Dialect: The Result of Language Interference. *Essays in Native American English*, ed. by H. G. Bartelt, S. P. Jasper, and B. L. Hoffer, 95-112. San Antonio, Texas: Trinity University.
- Mulder, J. 1986. Structural Organization in Coast Tsimshian Music. *Working Papers of the 21st Annual International Conference on Salish and Neighboring Languages*.
- Mulder, J. 1987a. Morphological Ergativity in Coast Tsimshian (Sm'algyax). *Native American Languages and Grammatical Typology*, ed. by P. D. Kroeber and R. E. Moore, 165-85. Bloomington, Indiana: Indiana University Linguistics Club.
- Mulder, J. 1987b. Syntactic Ergativity in Coast Tsimshian (Sm'algyax). *Working Papers of the 22nd Annual International Conference on Salish and Neighboring Languages*.
- Mulder, J. and E. Hunter. 1987. Cree 101 - Textbook: First Term. University of Alberta: School of Native Studies.

ABSTRACT OF THE DISSERTATION

Ergativity in Coast Tsimshian (Sm'algyax)

by

Jean Gail Mulder

Doctor of Philosophy in Linguistics

University of California, Los Angeles, 1988

Professor Sandra Thompson, Co-Chair

Professor Pamela Munro, Co-Chair

This dissertation examines the various properties of morphological and syntactic ergativity with respect to the Coast Tsimshian language. First, in Chapter 1, an overview is given of the genetic affiliations of Coast Tsimshian, its phonology and past research on the language, as well as a discussion of the orthography that is used in this study and in the Coast Tsimshian communities in British Columbia. Then, in Chapter 2, correlates of ergativity at the morphological level are presented. It is shown that ergativity occurs in the connective system which is roughly analogous to case marking, the pronominal system, and person and number agreement on the verb, and that the distribution of ergativity is conditioned by the tense/aspect of

the clause, the mood of the clause and the person or semantic nature of the A and O relative to each other. I conclude that this language is very highly, but not thoroughly, ergative. In Chapter 3, a range of syntactic constructions are investigated to determine whether they are ergative, accusative or neither ergative or accusative and I conclude that while Coast Tsimshian is not highly syntactically ergative, there are a number of respects in which various syntactic processes are still definitely ergative. In Chapter 4, the findings of the previous two chapters are summarized and the implications are considered from a cross-linguistic perspective. At the morphological level I argue that the splits in ergativity in Coast Tsimshian do not support the hierarchy of split ergativity proposed by Silverstein (1976) and I suggest that the factors conditioning the splits in ergativity are related through their coding of transitivity. At the syntactic level, I compare Coast Tsimshian with other languages with syntactic ergativity and examine the notion of subject with respect to the ergative orientation of the syntax in Coast Tsimshian. Next, the Epilogue is a sociolinguistic study of the Coast Tsimshian speech community from the period of first sustained white contact to the present. It serves as a description of the real-life context from which the linguistic analyses in the rest of the study are abstracted.

Introduction

"Ergativity" has been defined in a number of ways in the recent linguistic literature (Comrie 1973, 1978, Anderson 1976, Dixon 1979 and Cooreman, Fox and Givón 1984). In the broadest sense a language is said to show ergative characteristics if an intransitive subject is treated in the same manner as a transitive object and differently from the transitive subject.

The discovery of different morphological, syntactic and semantic consequences of the ergative characteristics in languages has given rise to the variety of definitions. For example, Comrie (1973) defined ergativity purely in terms of the morphological marking of a transitive subject versus the morphological marking of an intransitive subject and transitive object. Reflecting the growing data on ergativity, Anderson (1976) distinguished two types of ergative languages: morphologically ergative languages, where an ergative pattern occurs in the morphological markings but syntactic processes continue to operate in a nominative pattern and syntactically ergative languages, where various syntactic processes as well as morphological markings operate in an ergative pattern. Dixon (1979) expanded the understanding of ergativity by giving a typology of the various realizations of morphological ergative markings, the splits from a fully ergative morphology, and by dividing

syntactic operations into those which are universally accusative and those which are language-particular and can be ergative. More recently, Cooreman, Fox and Givón (1984: 2-3) have defined ergativity in functional terms as a language type where:

the morphology is oriented toward the transitivity properties of the clause, and transitivity is itself a complex epiphenomenon that correlates directly neither with propositional-semantic roles nor with subject/topic status, although both clearly play important parts in defining transitivity.

This dissertation takes the different properties that have been given as examples of ergativity and explores them with respect to the Coast Tsimshian language. First, however, in Chapter 1, an overview is given of the genetic affiliations of Coast Tsimshian, its phonology and past research on the language, as well as a discussion of the orthography that is used here and in the Coast Tsimshian communities in British Columbia. Then, in Chapter 2, correlates of ergativity at the morphological level are presented, while in Chapter 3, the syntactic reflexes of ergativity in Coast Tsimshian are considered. In Chapter 4, the implications of the Coast Tsimshian data for the various definitions of ergativity discussed above are explored along with the rationales that have been given to account for the cross-linguistic variation in this type of language typology. Next, the Epilogue is a sociolinguistic

study of the Coast Tsimshian speech community from the period of first sustained white contact to the present. It chronicles the struggle by the Coast Tsimshian people to preserve their language despite enormous pressures to assimilate. It also serves as a description of the real-life context from which the linguistic analyses in the rest of the dissertation are abstracted.

The choice of examples used in the body of the dissertation reflect my philosophy that grammatical analysis should not be based solely on materials obtained in direct elicitation (generally, sentence translation) sessions and that no data should be used which has been produced by the linguist with or without "confirmation" from a native speaker of the language. This view comes from my experiences with my early fieldwork on this language which often turned out to be overly simplistic or seriously wrong. While I have used direct elicitation sessions to clarify grammatical processes found in non-directly elicited data, none of the analysis presented here is based solely on directly elicited data. For the sake of the reader, some of the grammatical processes examined in the dissertation are illustrated first with simpler direct elicitation examples and then with the more complex non-direct elicitation data.

My sources of data include work on Coast Tsimshian by Boas and Dunn (detailed listings are given in Section 1.3). Most of Boas's examples are based on narratives he

collected while Dunn's examples are a mixture of direct elicitation and examples from texts. My own data collection includes legends, speeches and sermons which I recorded, direct elicitation sessions, and literacy and curriculum materials which were prepared with the Sm'algyax Language Teachers of School District No. 52 (Prince Rupert). The individuals involved were Ernie Hill and Mildred Wilson (Hartley Bay); Priscilla Bolton, Marjorie Brown and Beatrice Robinson (Kitkatla); Pauline Dudoward, Rita Hayward, Verna Helin, Marion Musgrave and Doreen Robinson (Lax Kw'a-laams); and Sylvia Leighton (Metlakatla, B.C.) who all generously shared their knowledge and insights into the Coast Tsimshian language. With my own data, and where it is clear in Boas's and Dunn's data that the examples were directly elicited, I have indicated this by a superscript E at the end of the example sentence.

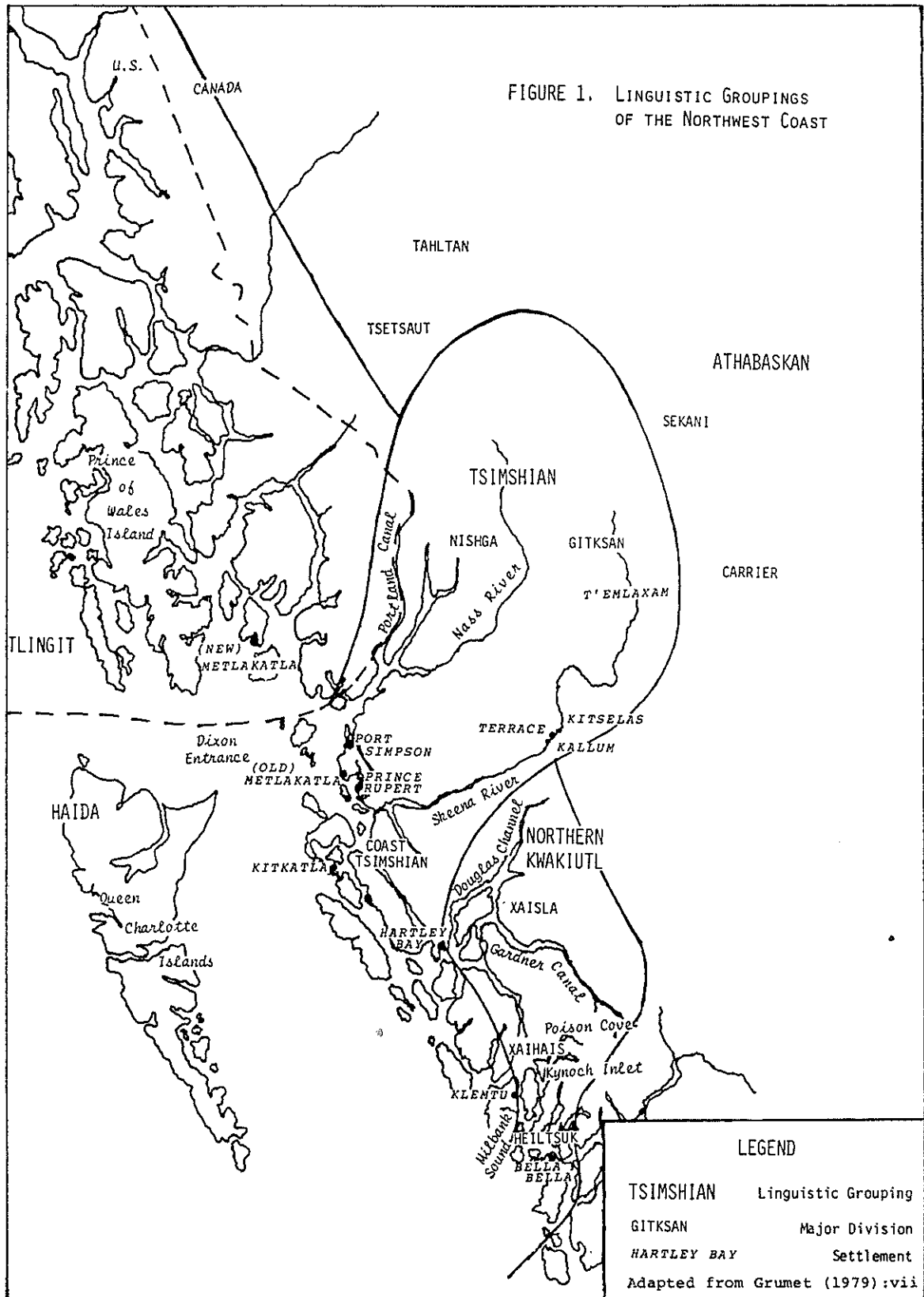
Chapter 1: Coast Tsimshian (Sm'algyax):

The Language and Its Speakers

1.1 Introduction

The Tsimshian¹ of the northernmost portion of coastal British Columbia consist of four linguistic and socio-cultural divisions - the Nishga of the Nass River valley, the Gitksan of the upper Skeena River Valley, the Coast Tsimshian to the north and south of the mouth of the Skeena River, and the Southern Tsimshian presently consisting of a few families in Klemtu and Hartley Bay, B.C. (see fig. 1). The immediate neighbors to the south of the Coast Tsimshian are the northern Kwakiutl groups: the Xaisla at the heads of Douglas Channel and Gardner Canal, the Xaihais at Poison Cove and Kynoch Inlet, and the Heiltsuk on the outer coasts of Milbanke Sound. The Haida on the Queen Charlotte Islands are the western neighbors of the Tsimshian and the Tlingit are their northwestern neighbors beyond Dixon Entrance and Portland Canal. The interior neighbors of the Gitksan are the Athabaskan speaking Wet'suwet'en, Carrier, Sekani, Taltan and now extinct Tsetsaut.

The Tsimshian take their name from that of the Skeena River, which is Ksian: ts'm- is a nominal proclitic signifying the 'inside of an object'; the initial k- of Ksian is a locative proclitic marking place names; yielding a literal meaning of 'inside the Skeena River'.



Coast Tsimshian (Smalgyax²) is spoken since the late 19th century in (New) Metlakatla, Alaska, as well as in British Columbia. Coast Tsimshians in Alaska number about 1,000 with about 200 speakers of the language, none of them children. There are approximately 4,000 Canadian Coast Tsimshians. Contemporary communities include Hartley Bay, Kitkatla, Lax K'walaams (Port Simpson), (Old) Metlakatla, Kitselas, Kallum and the mixed Heiltsuk Kwakiutl/Coast Tsimshian village of Klemtu. In addition, there are large numbers of Coast Tsimshian people in the towns of Prince Rupert and Terrace.

Although there is no accurate survey of the total number of Canadian speakers of the language, Sequin (1979c) has done a detailed census of the speech community at Hartley Bay. Briefly, of the 176 resident community members, 104 were placed in categories ranging from 'complete fluency' (may be more comfortable in Coast Tsimshian than in English for some topics) to 'minimal competence' (generally converses in English, but comprehends Coast Tsimshian and uses words and phrases in Coast Tsimshian). Of the remaining 72, 58 were listed as having 'no practical competence' (apparent comprehension of only words and phrases), while the remaining 14 were people who originally came from other communities and who may comprehend, but rarely speak Sm'algyax or who were otherwise difficult to classify.

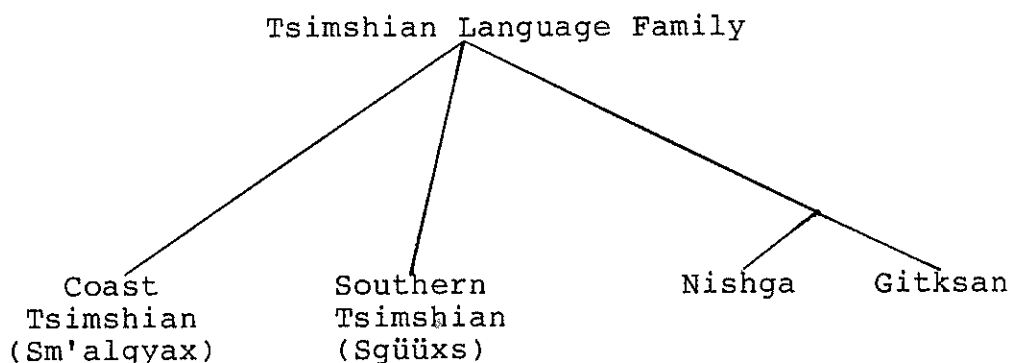
In general, all indications are that the use of

Sm'algyax is waning under English pressure. This has led to the present situation of complete speaking command of both languages among the older age groups varying to almost a complete lack of speaking ability in Sm'algyax among the younger age groups. The shift has been gradual and covers several generations.

The extent of the shift toward English and away from Sm'algyax correlates not only with age but also with the population size and degree of geographic isolation of the community. The smaller and more isolated the community (e.g. Hartley Bay), the less advanced is the shift to English. In the larger and less isolated communities (e.g. Lax K'walaams) or in towns where the Coast Tsimshian are only one part of the population (e.g. Terrace), the shift to predominately English use is much more advanced.

The genetic structure within the Tsimshian language family was first described by Boas (1888, 1889) who distinguished two groupings - the first, 'Nisgha', spoken by the Nisgha and Gitksan, and the second, 'Tsimshian proper', spoken by the Coast Tsimshian. This was later modified by Dorsey (1897) who divided the 'Nisgha grouping' into two dialects, Nishga and Gitksan. This analysis of Nishga and Gitksan as being dialects of the Nass-Gitksan language rather than separate languages was also reported by Rigsby (1967, 1970, 1975). However, since that time, Rigsby (1986) has considered the dialect/language question in

broader terms, and on the basis of socio-cultural considerations as well as linguistic evidence now recognizes Nisgha and Gitksan as separate languages. On the coast, Dunn (1976) discovered that there is a second coastal Tsimshian language that is still spoken by several families in Klemtu and Hartley Bay. The native name for this language, which Dunn calls 'Southern Tsimshian', is Sgüüxs. Although an in-depth analysis of the language remains to be done, initial indications are that it is as distinct from Coast Tsimshian as it is from Gitksan and Nishga. In summary, the internal structure of the four languages of the Tsimshian family may be represented as:



The wider genetic relationships of the Tsimshian language family were first examined by Sapir who proposed that this language family was the northernmost branch of the Penutian family (Sapir 1921, 1929). However, beyond the proposed classification, Sapir published no detailed evidence for the relationship.³ Despite the lack of documentation, until relatively recently the Penutian relationship

was generally regarded as established. Hymes (1957 and 1964)) and Silverstein (1969, 1979) have readdressed the Tsimshian-Penutian link and found that while there is some evidence for the relationship it is still undemonstrated and problematic. As a result, the current generally accepted position is to consider the Tsimshian language family as an isolate. Perhaps as more detailed grammars of all four Tsimshian languages and other Northwest Coast languages become available the wider genetic relationships of this language family will be able to be determined.

1.2 An Overview of Coast Tsimshian Phonology

The inventory of Coast Tsimshian consonant phonemes, given in Figure 2, includes an ejective series in the stops and affricates and an implosive series in the nasals, approximates and laterals.

Unlike Dunn (1970), I have included a voiced series of stops and a voiced affricate as phonemic. In his analysis, a plain stop or affricate "becomes voiced intervocalically or before a vowel and, optionally, in morpheme final position following any sonorant segment" (Dunn 1970: 61). While this rule accounts for a large part of Coast Tsimshian, examples of voiceless stops and affricates in intervocalic or prevocalic position are not that difficult to find:

gyipaaygansk	[g ^y ipáɨgansk]	airplane
ha'litoo	[hælit ^h o.]	dresser

Figure 2. Coast Tsimshian Consonant Phonemes

	bilabial	alveolar	palatal	velar	labial	uvular	pharyngeal	glottal
Stop:								
ejective	p̥	t̥	k̥y	k̥	k̥w	q̥		ʔ
voiceless	p	t	k ^y	k	k ^w	q		
voiced	b	d	g ^y	g	g ^w	g		
Nasal:								
(plain)	m	n						
implosive	m̥	h̥						
Fricative:		s						
Affricate:					x̥			
ejective		č̥						
voiceless		c						
voiced		z						
Approximate								
(plain)			y̥		w̥			
implosive			ŷ		ŵ			
unrounded:								
(plain)								
implosive								
Lateral:								
(plain)		l						
fricative		ɬ						
implosive		ɭ						

Figure 3. Coast Tsimshian Vowel Phonemes

	front	back
(unrounded)	unrounded	rounded
high	i	u
mid	e	o
low	æ	a

awta	[ʔəwt ^h ʌ]	porcupine
k'akawtk	[kʌkəwt ^h k ^h]	to howl
p'atsa	[pʌc ^h ʌ]	necklace, necktie
biiltsük	[bi'ɪc ^h uk ^h]	red sunset

I have also included a palatal series of stops, /k^y/, /k^y/ and /g^y/, as phonemic. In contrast, Dunn (1970:57) derives these by a rule which palatalizes /k̊/ and /k/ before all vowels and in morpheme final position. Application of the voicing rule given in the previous paragraph then generates the voiced palatalized velar stop. However, this analysis does not seem to be correct, and in the introduction of his non-technical reference grammar Dunn (1979f:4) says instead that palatalization occurs before round vowels ([u] and [o]), "often" before an unround vowel and optionally with [k] at the end of a word. In his dictionary (Dunn 1978a), though, examples of plain velars before rounded vowels are, again, not that hard to find:

k'oo	[k̊o•]	backbone
k'ul'on	[k̊ulʔɔ̃n]	three (of measures)
gu'pl	[gúp̚]	two (of abstract or round objects)
goo	[go•]	what (interrogative pronoun)

With regard to aspiration, all plain noncontinuant obstruents, as Dunn (1970:62) has stated, become aspirated before a morpheme boundary or before another noncontinuant segment:

nuutk	[nu.t ^h k ^h]	to dress
ts' <u>a</u> k	[čaq ^h]	clam
waap	[wɤ.p ^h]	house
liitsk	[li.c ^h k ^h]	grouse

The vowel quality phonemes are given in figure 3. With these seven vowel qualities, five types of vowels are distinguished in Coast Tsimshian: short, long, glottalized, diphthongs and falling. (This last type of vowel begins with a period of even pitch and then offglides to []). The phonemic status of each of these types and the allophonic variation of the vowel quality phonemes across the various types is illustrated in the following discussion.

Examples demonstrating that length is phonemic are:

aap	[ʔa.p ^h]	father (address, woman speaking)
ap	[ʔap ^h]	bee
iis	[ʔi.s]	yeast
is	[ʔis]	to smell like
gool	[gɔ.l]	to spill (something)
gol	[gɔl]	loon

In unstressed syllables, short /i/ becomes [I] (if not in word final position) and short /a/ becomes [ʌ]. An alternate approach proposed by Leer (1975b:4-5) is to say that there is one short unstressed vowel, /ə/, which varies considerably depending on its environment: [ʌ] occurs after [ʔ] and [h] or when next to an uvular, and [I] occurs else-

where. As the following examples show, though, this distribution statement would need to be modified:

nisahoon	[nɪsʌhɔ̃·ʌn]	fish trap, weir
'watsa	[wʌc ^h ʌ]	land otter
müdzagalee	[mʉʒʌgʌlé.]	flowers
gyilagyoo	[g ^y ɪlʌg ^y ɔ̃.]	robin

In stressed syllables short /a/ appears to only occur before or after uvulars:

'lax	[lʌx]	needle
k'asgi	[kʌsɡi]	to be unripe
gan	[ɡʌn]	stick, tree, log

The mid front vowel /e/ generally is pronounced as [ɛ] when it is short:

yel	[yɛl]	fish slime
mela	[mɛlʌ]	to be in a hurry

In some words long, glottalized or falling /e/ is also pronounced as [ɛ̃]:

sgyeetk	[sg ^y ɛ̃·t ^h k ^h]	to be easy
gye'ets	[g ^y ɛ̃ʔɛc ^h]	going down an inlet
meex	[mɛ̃·ʌx]	pine cone, pine nut

Leer (1975b:2) has proposed that short /e/ can be derived by rule since he claims that it only occurs before palatals. However, there are many instances where it occurs before other consonants:

yeni	[yɛ̃ni]	marten
legi	[lɛ̃gi]	algae

gyet	[g ^y εt ^h]	person, man
------	-----------------------------------	-------------

Finally, the pronunciation of /o/ seems to vary from [ɔ] to [o] depending on the speaker and the word. Some words have one of the two vowels as a general pronunciation:

ol	[ɔl]	bear
<u>k</u> 'ooxs	[q̣o·xs]	maple tree

while others seem to alternate between the two:

moksk	{ [moksk ^h] [mɔksk ^h]	white
nook	{ [no·k ^h] [nɔ·k ^h]	to lie down

The glottalized vowels occur only with long vowels and contain a glottal stop or a period of creaky voice in the middle of the vowel. The second vowel or coda is often neutralized to [ʌ] in all but careful speech (an acoustical study of glottalized and falling vowels is in Mulder (forthcoming a)). Some examples of this type of vowel are:

ɬa'at	{ [ɬɤʔæt ^h] [ɬɤʔʌt ^h]	ball
lo'ots	{ [loʔoc ^h] [loʔʌc ^h]	elderberry
la'ax	{ [laʔax̣] [laʔʌx̣]	to bite (something)

The falling vowels begin with a period of even pitch and then offglide to [ʌ]. Leer (1975b:7-9) notes that they

occur only in stressed syllables and distinguishes short and long falling vowels. The short falling vowels, he finds, always occur with a sonorant closing the syllable whereas the long falling vowels are only sometimes followed by a sonorant. In the following examples, a ^ marks the falling vowel.

ts'al	[čʰɛl]	to cut fish for drying
ts'âl	[čʰɛʌl]	eye
haas	[hɛ.s]	fireweed
hâas	[hɛ.ʌs]	dog
mooms	[mɔ.ms]	cripled, mentally ill, left-handed
môon	[mɔ.ʌn]	salt
siin	[si.n]	to be dizzy
sîipk	[si.ʌp ^h k ^h]	to be sick

There are three diphthongs that occur regularly in Sm-'algyax, each with a short and long version: [aɪ], [aɪ̯] and [ɔɪ̯].

haydmx	[haɪdmx̥]	Haida language
haaytk	[ha.ɪt ^h k ^h]	to stand up
txaw	[tɛxɔ]	halibut
ts'aaw	[čʰɛ.ɔ]	insides of body
hoyax	[hɔɪ̯ax]	to be correct
sm'ooygyit	[smʔɔ.ɪg ^y ɪt ^h]	chief

Some of the common morphophonological processes should be mentioned here, as an understanding of them will aid the

discussion of the grammar of Coast Tsimshian in the remaining chapters. First, an epenthetic vowel is sometimes inserted when a complex consonant cluster is created at the end of a word by the addition of one or more suffixes. This vowel is a short unstressed vowel that varies from [ɪ] to [ʌ] depending on its environment (see discussion above):

<u>k</u> 'odz	[qɔʒ]	to cut
<u>k</u> 'oodzax	[qɔʒʌx]	break (something), die (a person)
loop	[lɔʌp ^h]	rock
loopis	[lɔʌpɪs]	testes

With the addition of a suffix, morpheme final voiceless stops and affricates are voiced when they occur between voiced segments:

gyemk	[g ^y ɛmk ^h]	sun, moon
gyemgat	[g ^y ɛmgʌt ^h]	astronomer
süülk	[sʷɪlk ^h]	middle
süülgas	[sʷɪlgʌs]	forenoon

and the uvular fricative /x/ becomes [q] in the same environment:

adawx	[ʔɛdɛux]	legend
adawqm awta	[ʔɛdɛuqm ʔɛut ^h ʌ]	the legend of porcupine
gaboox	[qʌbɔʃx]	cockles
gabogm p'axs	[qʌbɔʃqm pʌxs]	corduroy pants (from ridges like on a cockle shell)

The connective (case marking) suffixes undergo several modifications depending on the final segment of the word to which they are added. The a in the connectives -a and -as is realized as \emptyset when it follows a vowel, l, m or n:

an'on + a duus ---> an'on duus [ʌnʔɔn du.s]
 hand CN cat
 POSS
 cat's paw

ts'al + as Paul ---> ts'als Paul [tʃʌls pa.l]
 face CN
 POSS
 Paul's face

The connective -s is realized as \emptyset after words ending in -s:

baas + sga sts'ool ---> baasga sts'ool [bʌ.sga sʃo.l]
 to be CN beaver
 afraid PRED
 beaver was afraid

When the first person singular (possessive) suffix -u is added to a word ending in a vowel, a -y- is inserted between the two vowels:

noo	[no.]	mother
nooyu	[no.yu]	my mother
yaa	[yæ.]	to go (SG)
yaayu	[yæ.yu]	to go-1SG

1.3 Coast Tsimshian Language Scholarship⁴

It is possible to distinguish four types of linguistic work on Sm'algyax by people other than the Coast Tsimshians themselves. There are early word lists, missionary trans-

lations, linguistic studies, and educational materials.⁵ Sometimes the same people have worked in several different areas.

1.3.1 Early Word Lists

The early word lists were generally made by missionaries or traders and doctors employed by the Hudson's Bay Company (for a brief history see the Epilogue). The earliest known Coast Tsimshian vocabulary was made by an American missionary en route to Hawaii (Green 1829). The next word lists were recorded by Dr. William Fraser Tolmie, Surgeon to the Hudson's Bay Company. These data were included in an article written by Scouler (1841:215-50). Later, in 1850, Tolmie collected some data from the Gitisdzu dialect (Tolmie 1850).⁶ Then, in 1884, Tolmie and George M. Dawson published some Kitkatla and "Kintunto" (Metlakatla, B.C.) vocabularies which were collected in the winter of 1875-6 from members of these tribes in Victoria (Tolmie and Dawson 1884). There are also several surviving anonymous wordlists of 1,200 entries each which appear to date from around this time (Anonymous n.d.a, n.d.b).⁷

In 1854, Dr. John Kennedy, Chief Trader of the Hudson's Bay Company, gave a completed Smithsonian 180-word-list form to Capt. W. A. Howard, who gave it to George Gibbs, who included it in a report to the Smithsonian Institute in 1860 entitled Notes on the Northern Tribes Visited in 1854 (Gibbs 1860). Gibbs also collected other

material (Gibbs n.d.) which, along with lists by Gibbs from Dr. Kennedy's list in Gibbs (1860) and Tolmie's (1850) list, were edited and published by W. H. Dall after Gibbs' death (Gibbs and Dall 1877). Some notes on the use of numerals along with two different number systems and some verb paradigms were also published posthumously by Dall (Gibbs 1877).

A Dictionary of Indian Tongues including 350 Coast Tsimshian entries was published in 1862 (Hibben and Carswell 1862). This was followed by another wordlist recorded by George Davidson from Clah, the missionary Duncan's interpreter and consultant, on a Smithsonian 180-wordlist form with about 30 additional entries including several verb paradigms. This list was published in the 1867 United States Coast Survey Report (Davidson 1867).

The final two wordlists from this era are a comparative vocabulary including 16 Coast Tsimshian terms by J. N. B. Hewitt (Hewitt 1896) and an article by E. F. Wilson containing some grammatical notes and about 120 vocabulary items (Wilson 1890).

1.3.2 Missionary Translations

Most of the missionary translations were done by two men, William Duncan and William Ridley. Despite allegations by the Church Missionary Society that Duncan had provided no material in Coast Tsimshian,⁸ a considerable body of Duncan's early work survives in the National Ar-

chives of Canada (Duncan 1859-1896). This collection of his work includes 445 pages of Bible translations, litany, hymns, psalms, prayers and a confessional prepared for visiting house to house, most of which are dated before 1880. In addition, Duncan (1880) is a 26 page church manual with hymns, the Lord's Prayer and Benediction in an earlier orthography than Duncan (1885), which is three pages of Bible passages.

Bishop Ridley's work focused on Bible translations, resulting in translations of all of the New Testament except for Acts, Hebrews and Revelations (Ridley 1882b, 1882c, 1887, 1888a, 1888b, 1889, 1898). Other religious works include a 16-page morning prayer (Ridley 1880a), two different hymnals (Ridley 1881, 1882a) and portions of the Book of Common Prayer (Ridley 1885, 1892). Ridley also published a periodical entitled Ashigiamuk 'The Sunbeam' which was mostly in Coast Tsimshian, reporting on events in the community and giving some religious material (Ridley 1887-88).⁹

The remaining known religious materials include a portion of Acts in an orthography unlike either Duncan's or Ridley's (Anonymous 1879), eleven hymns by Archdeacon Kirkby (Kirkby 1885), two hymns by William Henry Collison (Collison 1875) and one hymn by Charles Montgomery Tate (Tate 1900).

1.3.3 Linguistic Studies

The linguistic analysis of Sm'algyax can be divided into three historical periods: early grammars (1878-1902); grammatical analysis and text collection done by Franz Boas, William Beynon and Henry W. Tate (1886-1955); and recent linguistic studies (1969-present).

The tradition of Coast Tsimshian linguistic analysis began with a short grammar by Pym Nevins Thompson in 1878 (Thompson 1878). This was followed in 1889 by an article giving sixteen Sm'algyax proverbs, their translations and an analysis by Mrs. O. Morison of Metlakatla, B.C. who was Ridley's interpreter and probably co-authored most of the translations that Ridley published (Morison 1889). Then in 1894, Count A. F. Graf von der Schulenberg produced a lengthy grammar in German based on Ridley's translation of the four Gospels and Boas (1889 and 1891) (von der Schulenburg 1894). The grammar focuses on the inflectional features of the language and includes a Coast Tsimshian-German and German-Coast Tsimshian lexicon. A highly critical review of the work was done by Boas (1899).

Other early grammars include "A Grammar of the Zimshian Language, with Some Observations on the People" by Ridley which contains a phonology, a grammar based on Latin grammar and comparisons with other languages (Ridley 1895). "A Synopsis of the Zimshian Language" was prepared by Jessie Crosby, the Coast Tsimshian-speaking daughter of

Rev. Thomas Crosby (Crosby 1897). And in 1902, Raoul de La Grasserie published a French volume on five British Columbia languages including Coast Tsimshian (La Grasserie 1902). The grammatical sketch and vocabularies are based on Tolmie and Dawson (1884) and on von der Schulenberg (1894) and the texts are based on Ridley (1882b).

However, despite these studies, the bulk of early Coast Tsimshian grammatical analysis is due to Franz Boas.¹⁰ His first fieldwork on Coast Tsimshian was in Victoria in 1886 with Matthias of Melakatla, B.C. (Boas 1886). This was followed in 1888 and 1889 by work with Mrs. O. Morison, Ridley's interpreter, and Mrs. Lawson of Fort Simpson. These fieldwork sessions resulted in several texts which were published in von der Schulenberg (1894), a grammatical sketch published in 1889 (Boas 1889), wordlists in "Vocabularies of the Tlingit, Haida and Tsimshian Languages" read before the American Philosophical Society (Boas 1891) and some texts in Indianische Sagen von der Nord-Pacifische Küste Amerikas printed in German (Boas 1895).

In 1902, Henry W. Tate, "a full-blooded Indian of Port Simpson", began sending texts to Boas until his death in 1914.¹¹ They were in Ridley's orthography with interlinear translation. Boas published one of Tate's texts in Coast Tsimshian and German with grammatical notes in 1908 (Boas 1908). Based on the texts, his previous fieldwork and his work on Nishga, in 1911, Boas published a grammar

of Coast Tsimshian and Nishga which included sections on the dialect distribution, phonetics, grammar and several texts (Boas 1911). For the publication of six long texts in Sm'algyax and English that Tate had sent him, Boas employed Archie Dundas of Metlakatla, Alaska to help him with the phonetics and grammar revisions. The result, Tsimshian Texts, New Series (Boas 1912), has 180 pages of texts in Sm'algyax with English on the facing page and a lexicon of about 2,000 items that is indexed to the texts. For the largest publication using Tate's work, Tsimshian Mythology (Boas 1916), Boas was unable to edit the texts with anyone and so just published free English translations that he prepared from Tate's interlinear translations. Boas (1916) does contain a Coast Tsimshian lexicon of about 600 items along with a list of about 375 Coast Tsimshian proper names and place names.¹² There are still a number of texts which Tate sent to Boas that remain unpublished (Tate 1902-1909).

The third major figure of this era was William Beynon, who was born in 1888 in Victoria of a Welsh sea-captain and a Tsimshian woman of the Gitlan tribe, whose father was Clah, Duncan's interpreter and consultant. Beynon learned Tsimshian from his mother and went to live in Port Simpson when he was twenty-five. In 1915, he began doing ethnography for white anthropologists which continued for over 40 years. In an extensively researched article on Beynon,

Halpin (1978) shows that he deserves the epithet of ethnographer, but in the anthropological literature he is identified as "informant and interpreter." Beynon first worked for Marius Barbeau, who taught him to write Coast Tsimshian, Gitksan and Nishga phonetically using the phonetic system Barbeau had learned from Sapir. Beynon collected ethnographic information and texts for Barbeau from 1915-1956. There are over 60 notebooks containing many terms and texts in Coast Tsimshian which Beynon collected for Barbeau (Beynon 1915-1956).¹³

In 1918 Beynon collected Coast Tsimshian and Nishga kin terms for Sapir (1918). And in 1932 he began sending texts to Boas. In all there are 252 narratives and ethnographic reports in Coast Tsimshian with interlinear English translation which Beynon sent to Boas between 1932 and 1939 (Beynon 1932-1939).¹⁴ These include rewritten versions of the bulk of Tate's texts that were translated into English in Boas (1916). One of the rewritten Tate texts was sent by Boas to Melville Jacobs in 1935 (Beynon 1933). English translations of ninety-nine of the "new" texts had been edited and typed for publication by Boas in "Ethnographic and Folkloristic Texts of the Tsimshian" (Boas 1939). More recently, Russell Hayward of Metlakatla, Alaska has prepared English translations of some of the texts and retranscribed some of these in Coast Tsimshian (Hayward 1980, 1981, 1983a, 1983b, 1983c). In these volumes, the texts in

Coast Tsimshian are all in Hayward's orthography (Hayward 1979) which is introduced at the beginning of each volume. However, the greater portion of the original Beynon texts in Sm'algyax still remain unpublished; they deserve to be published without further delay.

In 1939, Boas sent his student Amelia Susman to Port Simpson to work with Beynon on standardizing his orthography. Working with Beynon, Susman rewrote Boas's (1911) Tsimshian grammar (Susman 1940a), a phonemic statement of the language (Susman 1940b) and a study of the types of verbal suffixes (Susman 1940c).

Viola Garfield began working on Coast Tsimshian in 1928 in Ketchikan and Metlakatla, Alaska, where she taught elementary school. Her fieldnotes from this period (Garfield 1928) include a vocabulary of about 300 items, kin terms and the Lord's prayer. Then in 1932 she began working with Beynon. Her fieldnotes (Garfield 1932) include wax cylinder recordings and about 200 pages of unpublished song texts which were reviewed with Melville Jacobs in 1952, some legends and a 25 page lexicon. Again in 1934 they worked together collecting texts in Sm'algyax and English and various ethnographic materials. In 1934-1935 and 1937, Garfield worked in Seattle with Coast Tsimshian speakers (Garfield 1934). Jacobs also worked briefly on Coast Tsimshian in 1934, probably along with Garfield, and collected a text and put together a short lexicon (Jacobs

1934).¹⁵

The final paper to be mentioned from this period is a study entitled "The Tsimshian Relationship System" which is based on Boas (1912, 1916), Sapir (1918), Tate (1902-1909) and her own direct fieldwork (Durlach 1928).

No known linguistic analysis of Coast Tsimshian was published between 1940 and 1969, when John Dunn began fieldwork on the language. His work, which continues up to the present, covers a wide range of scholarship. Discussions of dialects, internal relations within the Tsimshian language family and linguistic prehistory are covered in Dunn (1969a, 1969b, 1976 and 1979a). Kin terms are the focus of discussion in Dunn (1972 [with Lucienne Dunn], 1979c and 1980a). Phonological studies include a general statement of the phonology of Coast Tsimshian (Dunn 1970), an analysis of two types of lenition associated with syllable-final uvulars (Dunn 1980c), a study with Rick Hays of syllables with glottalized and plain uvulars (Dunn and Hays 1980, 1983) and a work on Southern Tsimshian extrasyllabic initial stops (Dunn 1986). Grammatical studies include an analysis of the historical changes in morphological markings and syntactic usages (Dunn 1972a, 1972b, 1974), a discussion of the connective (case marking) system including some Southern Tsimshian data (Dunn 1979b), a 145 page Coast Tsimshian-English dictionary with a English-Coast Tsimshian index that uses the practical orthography (Dunn 1978a)

(which is reviewed in Eastman (1982)), a discussion of relativization and topicalization (Dunn 1978c), several different studies of the reduplication process (Dunn 1978c, 1979g, 1980b, 1981) (Dunn (1981) also covers Southern Tsimshian), an analysis relating the three pronominal affix series to the tense-aspect system (Dunn 1979d), a presentation of the syntactic and semantic functions of derivational suffixes (Dunn 1979e, 1983) and a non-technical reference grammar with many examples (Dunn 1979f).¹⁶

Other work on Coast Tsimshian has been conducted by Jeff Leer in Metlakatla, Alaska. He has done a partial re-elicitation and retranscription of the lexicon in Boas (1912) (Leer 1975a) and a report on some aspects of the vowels and the implications for the orthography (Leer 1975b), and has collected three texts and some miscellaneous materials (Leer 1976).

In Klemtu, B.C. Jay Miller has collected 70 placenames and about 100 lexical items in Southern Tsimshian (Miller 1977).

Margaret Sequin has worked in Hartley Bay, B.C. and has done an analysis of conversational completion in Sm'algyax (Sequin 1978b), a study of code switching behavior in different generations in Hartley Bay (Sequin 1979b) and a sociolinguistic account of when and why Sm'algyax is spoken in this Coast Tsimshian community (Sequin 1979c).

I have been doing fieldwork on Coast Tsimshian since

1979 and my own work has included a study of the distinctive English dialect spoken in the Coast Tsimshian villages (Mulder 1982) and a structural analysis and transcription of the text and music of 20 Coast Tsimshian songs and dances (Mulder 1986).

1.3.4 Educational Materials

The final area of Coast Tsimshian language scholarship is that of educational materials. The school-based program under Arnold Booth and Mary Guthrie in Metlakatla, Alaska, was the first to begin preparing materials. These include a legend by Booth and Alfred Eaton (1974), a set of lessons in oral conversational Sm'algyax by Booth, Guthrie, Richard Dauenhauer and Nora Dauenhauer (1974), ten elementary level booklets in Sm'algyax to accompany videotapes of puppet-play by Guthrie (1979), a set of Tsimshian lessons with brief dialogues, vocabulary lists, and a few songs by Flora Mather, Conrad Mather and Leer (1977), three intermediate level books in Coast Tsimshian with English translation at the end by Guthrie, Booth and Louis Fawcett (1981) and an illustrated legend by Harold Hudson (Hudson n.d.). The Ketchikan Indian Corporation, in Ketchikan, Alaska, has also produced a series of simple dialogues with English translations on facing pages by Ann Young, Gayle Dundas and Guthrie (1979). Independently in Metlakatla, Alaska, Russell Hayward has developed his own orthography (Hayward 1979) and Sm'algyax calendar (Hayward 1981).

In British Columbia education materials were first produced in Hartley Bay by Margaret Sequin who wrote a beginning conversational Sm'algyax book with English translation, a lexicon and language and culture related activities for use in Grades 3, 4 and 5 (Sequin 1978a) and a Sm'algyax Alphabet Coloring Book (Sequin 1979a). In 1981, Sm'algyax curriculum development was begun by School District No. 52 (Prince Rupert, B.C.) with materials being developed by me and the Sm'algyax teachers: Mildred Wilson (Hartley Bay); Priscilla Bolton, Marjorie Brown and Beatrice Robinson (Kitkatla); Pauline Dudoward, Rita Hayward, Verna Helin, Marion Musgrave and Doreen Robinson (Lax Kw'alaams); and Sylvia Leighton (Metlakatla, B.C.). From 1981-1984 the following materials were developed: Sm'algyax language units for Nursery through Grade 3, a set of 12 primary level readers in Sm'algyax, a set of 6 intermediate level/adult level legends, an intermediate level/adult level book for learning the orthography, and a workbook for learning to use the dictionary. Audio-visual materials include slide-tape presentations in Sm'algyax of a legend and of birds of the Coast Tsimshian region and two videotapes in English of a potlatch and a poleraising and potlatch put on by the Sm'algyax Language Program in the Lax Kw'alaams Community School. Finally, support materials that were developed include a hymnal in Sm'algyax with English on the facing page, a primary level songbook, a yearly calendar and cer-

tificates of achievement and recognition in Sm'algyax (Mulder and Sm'algyax Language Teachers 1981-1984). In 1986, Kathy Bedard and the Sm'algyax Language teachers produced three additional primary level readers (Bedard and Sm'algyax Language Teachers 1986).

1.4 Orthographical Considerations

The grammatical material in this dissertation is written in the same orthography as that used in the Sm'algyax Language Program in Hartley Bay, Kitkatla, Metlakatla and Lax Kw'alaams, B.C., and with a few minor changes (discussed below) is the same as that developed by Dunn and used in Dunn (1978a and 1979f). This is done to make the material accessible to a wider range of readers, including Coast Tsimshian speakers and other people involved in Sm'algyax literacy and Native education. The practical orthography, which is presented in Figure 4, can be taken to provide essentially a broad transcription of Coast Tsimshian up to the point of, but not including, free variation in individual speech.

In the design of a practical orthography, I feel quite strongly that the role of the linguist is to help the speakers of a language determine the sounds that must be represented and what linguistically-appropriate letter or letter combinations can be used to represent these sounds. They must help the speakers understand the trade-offs in the

Figure 4. Linguistic Key to the
Sm'algyax Alphabet

Sm'algyax Alphabet	International Phonetic Alphabet	Sm'algyax Example	English Meaning
a	[æ]	aax	mouth
<u>a</u>	[a]	'yaax	to eat (PL)
	[ʌ]	lak	fire
aw	[au]	ganaw	frog
ay	[aj]	gaayt	hat
b	[b]	ba'wis	monkey
d	[d]	desx	squirrel
dz	[ʒ]	dzigaws	dried salmon
e	[e]	ganeexs	ladder
	[ɛ]	geesk	anal fin
g	[g]	gabilah	gun
gw	[g ^w]	gwe'a	poor
gy	[g ^y]	gyemk	sun, moon
<u>g</u>	[g]	gaax	raven
h	[h]	huus	root
i	[i]	xsgyiik	eagle
	[I]	gwida'ats	coat
k	[k]	ksaa	shark
k'	[k̚]	k'abatgüülk	children
kw	[k ^w]	kwduus	fish knife
k'w	[k̚ ^w]	k'waas	to break

ky	[k ^y]	kyoox	grass
k'y	[k ^y]	k'yaal	alone
<u>k</u>	[q]	gaaklik	mouse, rat
<u>k'</u>	[q̣]	k'a'at	cane
l	[l]	loop	rock
'l	[ḷ]	'lax	needle
l	[ɬ]	ɬgüülk	young one
m	[m]	moos	thumb
'm	[ṃ]	sa'mx	butter clam
n	[n]	na'ax	dress
'n	[ṇ]	'neexl	killer whale
o	[o]	sasoo	rattle
	[ɔ]	ol	bear
oy	[ɔi̯]	ooy	to throw
p	[p]	pts'aan	totem pole
p'	[p̣]	p'axs	pants
s	[s]	sgyet	spider
t	[t]	yaanst	sea prunes
t'	[ṭ]	t'a'awl	halibut hook
ts	[c]	'watsa	land otter
ts'	[c̣]	ts'ooxs	to dry
u	[u]	uuml	bucket
ü	[u̯]	üüla	seal
w	[w]	waap	house
'w	[ẉ]	'waan	teeth
w̃	[y̯]	dziiw̃	dolphin

'w	[³ ŷ]	'wah	olachen
x	[x̣]	xso	canoe
y	[y]	yeeh	spring salmon
'y	[³ ŷ]	'yuuta	man
'	[ʔ]	an'on	hand

amount of phonetic detail that is included in the orthography. It is not enough just to lay out an alphabet and expect people to use it or to even agree on the spelling of specific words. Ultimately, the issues in spelling must be resolved by the native speakers themselves, but the linguist and native speakers together can develop a linguistically appropriate writing system that will be used if the people that will be using it have been integrally involved in the design of it.

The spelling conventions that are given here have arisen from extensive use of the practical orthography by the Sm'algyax Language Teachers of School District No. 52 (Prince Rupert, B.C.).

1. Syllabic m, n and l are not underlined as in Dunn:

ntxalaa	descendants
moksm waap	the white house
llooks	to float (PL)

2. The back a is not underlined as in Dunn unless it is stressed:

<u>g</u> ayna	[gáina]	road, trail
w <u>a</u> n	[wan]	deer

3. Falling vowels are unmarked. Dunn marks them with an accent whereas Leer (1975b) writes them as Vh. It was felt by the native people using the orthography that not marking them does not create any problems, as in the few cases where there are minimal pairs, the correct meaning can easily be determined from the context.¹⁷

4. The short unstressed i [ɪ] and a [ʌ] are generally written as whichever is closest to the sound being transcribed. The short ü which Dunn sometimes uses is generally not used in these cases (e.g. gwisnap'a'la as compared to Dunn's gwüsnap'a'la 'button blanket').

5. Ejective consonants in Dunn are divided into two classes. In the first,

...the glottalic closure coincides with the consonant closure and the vocal cords are released after the consonant is released. This type of glottalization is indicated by an apostrophe after the consonant letter (k', k, p', t'). In [the second] the glottalic closure occurs before the consonant closure. This latter type of glottalization is indicated by an apostrophe before the consonant letter ('k, 'k, 'p, 't). (Dunn 1979f:1)

In the orthography as it is currently being used, an apostrophe is always written after the consonant unless it is in word final position in which case it is written before the consonant (e.g. ts'u'u'ts bird).

6. Punctuation follows the standard English usage since most Sm'algyax speakers are also literate in English. Capital letters are used for personal names, group names, and place names. They are also used at the beginning of sentences. Periods, question marks and exclamation marks are used as in English. Commas are generally used only to reflect a pause within a sentence in a narrative.

Notes

1. There has been much ambiguity of the use of the name Tsimshian in the anthropological/linguistic literature. Sometimes it is used to refer to the Coast Tsimshian and sometimes to refer to the larger grouping which includes the Nishga, Gitksan, Coast and Southern Tsimshian. Here I will use "Tsimshian" to refer to the whole language/cultural family and "Coast Tsimshian" exclusively for the coastal branch of the family. An alternate approach recently proposed by Tarpent and Rigsby (pc) is to use the term Tsimshianic to refer to the entire language family.
2. The Coast Tsimshian refer to their language as Sm'algyax (sm- real, algyax speech). However, the Nisgha and Gitksan people do the same. The three groups avoid confusion by using the term to refer to only the language spoken by their individual group and use other terms to refer to the languages of the other two groups. For the purposes of the present work I will use the terms Sm'algyax and Coast Tsimshian interchangeably to refer exclusively to the language of the Coast Tsimshian.
3. According to Swadesh (1964), Sapir was waiting for the appearance of more ample source material on some of the languages in the proposed Penutian family. Swadesh's paper does contain some comparisons (including Nishga and Coast Tsimshian) that were culled from several works left by Sapir to Swadesh.
4. I wish to thank Michael Krauss of the Alaskan Native Language Center for his help in researching this section. The most complete bibliography on the Coast Tsimshian language is in Krauss and McGary (1980), which continues to be updated on an ongoing basis.
5. I have excluded here any ethnographic studies or analyses which only include data that is originally from works cited here. However, I have included works on kin terms where new original data is presented or works that contain narratives or legends in Sm'algyax. The missionary publications are included here since, even though they are translations, they provide a large body of narrative samples. At some point it would be interesting to compare them grammatically and for structure and narrative style with the traditional legends recorded around the same time.
6. I would suspect that this word list is actually in Southern Tsimshian rather than Coast Tsimshian. How-

ever, from the transcription used by Tolmie it is very hard to tell.

7. The two n.d. vocabularies may be handwritten variants of each other, but I have not had an opportunity to compare them in detail.
8. Ridley, in a January 1886 letter (Janvrin 1903:24-5), claimed that Duncan had provided no printed religious material in Sm'algyax. This claim was also supported by Arctander (1909:363) who maintained that:

Mr. Duncan has never at any time made any translation of the Bible, or any part of it, into their language. He has such pious veneration for the old King James version that he can only think of an attempt to transfer it into their tongue as an absolute mutilation of the Holy Word.

9. Only two volumes of this periodical are known to exist.
10. Many of Boas' analyses and conclusions are discussed in detail in relevant sections elsewhere in this work.
11. For a fuller discussion of Tate's text collection for Boas see Maud (1982).
12. In a review of Boas (1916), Barbeau includes some background information on Tate and gives a very critical summary of his method of text collection (Barbeau 1917).
13. These along with Barbeau's materials are all in the Canadian Centre for Folk Studies, National Museum of Man, and have been recently inventoried by Cove (1985).
14. These are in the Columbia University Archives, Special Collections. Until 1979 they were "lost" as they had been misfiled under Benyon [sic]. An index to this collection was made by I.G. [full name unknown] in 1939.
15. Beginning in 1953 Beynon also worked with Philip Drucker, and in 1955 produced a "Ethnical and Geographical Study of the Tsemisyaen Nation" (Beynon 1955) which is a synthesis of the traditional histories of the Houses of a number of Tsimshian groups. As Halpin (1978:151-2) concludes, it should definitely be published.

16. Many of Dunn's analyses and conclusions are discussed in detail in relevant sections elsewhere in this work.
17. While at some level Sm'algyax speakers are aware of the falling vowels in minimal pairs in that they can correctly identify each word in these cases, they do not in general feel that the falling vowel is a very significant difference. The only minimal pairs which I have found are the following:

ts'al	[č̥əl] [č̥əʌ]	to cut fish for drying eye
haas	[hæ·s] [hæ·ʌs]	fireweed dog
gaax	[gɤ·x] [g̣ɤ·ʌx]	black, raven black bass
baal	[bɤ·l] [ḅɤ·ʌl]	feel, guard try
t'aa	[t̚a·] [t̚a·ʌ]	sit (SG) slap

Through spectrographic analysis I have verified that a falling vowel contrast is involved in each pair.

Chapter 2 - Morphological Ergativity

2.1 Introduction

In typological studies of ergativity a number of different expressions of ergativity have been found. In this chapter I explore the correlates of ergativity at the morphological level in Coast Tsimshian.

In the discussions that follow I continually need to refer to the three grammatical relations central to ergativity; for these I follow Comrie (1978) and Dixon (1979) and use the symbols S, A and O, where S refers to the single argument of an intransitive verb, A refers to that argument of a transitive verb which is most agent-like, and O refers to the argument which is most patient-like. It should be noted that while A is reminiscent of the semantic term agent and O of the syntactic term object, they are used here only as abbreviatory letters.

Similarly, I refer to the groupings of the three relations for an ergative or an accusative distribution of noun phrase classes by the following labels:

ergative	A	} nominative
	S	
absolutive	{	O accusative

With pronouns, for example, the pronoun for the argument of a transitive verb which is most agent-like in an accusative pattern is called the nominative and in an ergative pattern

it is called the ergative, whereas the pronoun for an object in an accusative pattern is the accusative and in an ergative pattern it is the absolutive.

Finally, a grammatical process or pattern is called ergative if the class of constituents to which it applies includes either some or all Os and some or all Ss but no As; or some or all As but no Ss or Os. In other words, if it opposes As to the set of Ss and Os. It is called an accusative process or pattern if it makes reference to some or all As and Ss but to no Os; or to some or all Os but no Ss or As. Thus if it opposes Os to As and Ss.

In Sections 2.2-2.7 of this chapter, I consider whether the morphological markings which indicate the function of a Coast Tsimshian NP in a sentence are ergative. This is done by examining the connective system (which corresponds to a case system) in Section 2.2, the pronominal system in Section 2.3, and person and number agreement on the verb in Sections 2.4 and 2.5, respectively. In Sm'algyax there are three factors which condition the distribution of some of the ergative morphological markings: the person or semantic nature of the A and O, the tense/aspect, and the mood of the clause. With the first factor, only the dependent pronouns and person agreement are affected, as opposed to the second and third factors, where the distribution of all of the types of ergative morphological marking are affected except that of number agreement. With these last

two factors, the connectives, dependent pronouns, and person agreement markings are divided into two classes which are defined by the tense/aspect and mood of the clause. The terms which Boas (1911) uses for the two classes of Coast Tsimshian clauses, and which for sake of convenience I will adopt here, are indicative and subjunctive. The split between indicative and subjunctive clauses based on tense/aspect is examined in detail in Section 2.6 and the split based on the mood of the clause, which has been labeled as a main-subordinate clause split (Dixon 1979:97), is discussed in Section 2.7.

In Section 2.8 I consider whether the processes which determine the internal semantic and morphological structure of the verb are ergative. That is, ergativity is examined at the lexical level in terms of whether the processes of verb formation are ergative. In Sections 2.8.1 and 2.8.2, the derivational processes with preverbal particles and suffixes, respectively, are explored, whereas in Section 2.8.3, noun incorporation is considered.

Then, Section 2.9 gives a summary of the types of morphological ergativity that have been found in Coast Tsimshian and the factors which govern the distribution of the ergative processes.

2.2 Connectives

2.2.1 Introduction

The connectives are an extensive system of suffixes which are always in word final position and mark words that are syntactically related in specific ways. As Dunn (1979b:131-2) has characterized them:

In some sense the connectives are case markers, since they carry information about the grammatical-semantic functions of the noun phrases they precede. In some sense they are also determiners, since they partially characterize the referential stipulation of following noun phrases, indicating whether they are proper nouns, pronouns, or common nouns....They are phonologically tied to the word they follow. Their phonological affinity is apparent in intonation patterning and in speaker-pausing/hesitation phenomena....Because of these facts, the term "connective" seems especially appropriate. These elements act as intermediaries between preceding and following material, being tied to the former phonologically and to the latter semantically....

There are adjectival and adverbial connectives, and predicative, possessive, and prepositional connectives. The last three of these types are relevant to the discussion of ergativity presented here and will each be examined in detail in the following sections.

These three types of connectives mark several syntactic and semantic distinctions, which are whether the head of the following noun phrase is a common or proper noun, whether it occurs in an indicative or a subjunctive clause,

and what its status is relative to the speech act.

With the status of a noun phrase relative to the speech act a three-way distinction is made. The terms which Boas (1911) uses, and which I will adopt here, are indefinite, present, or absent. The indefinite is used when the speaker wants to leave the status of the head of a noun phrase unspecified and is the most frequently occurring category. The present indicates that the head of a noun phrase is physically located at the place of the speech act and occurs most frequently in direct discourse, whereas the absent indicates that the head of a noun phrase is not present at the place of the speech act and is found most frequently in narratives and legends.¹

There is one additional factor that plays an important role in the predicative, possessive, and prepositional connectives which I will label as the 'oratory style of speech'. The range of connectives which Boas (1911, 1912) has recorded show more distinctions than what is generally heard now in everyday Sm'algyax or is generally given in traditional linguistic elicitation sessions. This, along with the fact that Dunn (1979b:134) notes that he only found some of Boas' connectives in rote memory texts from Kitkatla, British Columbia, would suggest that the language has lost a number of distinctions in its connective system and is evolving toward a much simpler system. Indeed, this is what Dunn (1979b:139-40) concludes. However, I

think that this conclusion is somewhat hasty.

I have found that the broader range of connectives do still occur in a number of contexts: traditional legends that have been recorded within the last five years, speeches given at community events, feasts and potlatches, and sermons given in Sm'algyax, in short, in places where an 'oratory' style of speaking is used. Historically, a spokesman was specially trained to speak for a chief and people were trained to be traditional storytellers. Not only does a Coast Tsimshian person have to have ownership of a legend or narrative, but she/he also has to be versed in the 'proper' way of telling it. Sm'algyax speakers who perform these roles are traditionally elders and have had a number of years in which to listen and prepare for their roles.

In terms of Boas' work, the bulk of the material that his grammatical sketch is based on is texts where one would expect the more elaborate speech style, yet even here he found that some of the speakers he elicited texts from did not make all of the connective and demonstrative distinctions (Boas 1912:68-9). Dunn (pc) has also told me that he hears more of these connective distinctions being made now than he did ten to fifteen years ago. As I describe in the Epilogue, the language is presently in a critical stage as to whether it will be maintained or whether it will become just a language of communication for the older generation.

One facet of this will be whether younger people continue to be exposed to the more fully inflected styles of speaking and whether some continue to be specifically trained to use it.

The following sections present the distribution of the predicative, possessive, and prepositional connectives with respect to these syntactic and semantic factors of whether the head of the following noun phrase is a common or proper noun, whether it occurs in an indicative or a subjunctive clause, what its status is relative to the speech act, and whether an oratory or simplified style of speech is being used.

2.2.2 Predicative Connectives

The predicative connectives in Coast Tsimshian mark the S in an intransitive sentence, as -a on siipg- 'sick' in (1) and O and A in a transitive sentence, as -da on huum- 'smell' and -a on duus 'cat', respectively, in (2) illustrate:

- (1) Nah siipg-a l̥guwoom̥k.
 PAST sick -CN child
 PRED
 The child was sick.

- (2) Yagwa-t huum -da duus-a hoon. (E)²
 PRES -3 smell-CN cat -CN fish
 A PRED PRED
 The cat is sniffing the fish.

(The -t on yagwa 'PRES' marks verb agreement with the A, duus 'cat', and is discussed in detail in Section 2.4.)

As the two examples demonstrate, the predicative

connectives are ergative. The same connective -a marks the S and O and is different from the -da which marks the A.

2.2.2.1 Full System of Predicative Connectives

In the more fully inflected style of speech, the choice of predicative connective depends on the syntactic relation of the following noun phrase to the verb, whether the head is a common or proper noun, whether its location relative to the speech act is indefinite, present or absent, and whether the clause is indicative or subjunctive. The full range of predicative connectives, as recorded by Boas (1911:355), are summarized in (3):

(3) Predicative Connectives (full)

	<u>common noun</u>			<u>proper noun</u>		
	<u>indef.</u>	<u>pres.</u>	<u>absent</u>	<u>indef.</u>	<u>pres.</u>	<u>absent</u>
<u>indicative</u>						
absolutive	} -a	-da	-ga	-at	-dat	-gat
ergative		-sda(?)	-sga	?	?	-s
<u>subjunctive</u>						
absolutive	} -a	-sda	-sga	-s	-das	-s
ergative		-da	-tga	-dat	-dat	-tgat

It is difficult to find some of the ergative indicative connectives, as indicative clauses are much less common than subjunctive clauses in narratives and where they do occur, the ergative is almost always expressed either as a pronominal suffix on the verb or, when it is a full noun phrase, in preverbal position.

Examples of some of these connectives that I have found in texts I have collected are given below:

- (4) Ada-t wil t'aa-di -tga awta sts'ool gi
and-3 then sit -TRANS-CN porcupine beaver DEM
A PRED
Then porcupine set beaver down on a branch at the

-sga k'awts^ugn-tga aniis -gi -sga n -ts'waan
-CN one long-CN branch-DEM-CN POSS-top
PREP object ADJ PREP
top of the tree.

-sga gan -ga.
-CN tree-DEM
POSS

In (4), the A NP, awta 'porcupine' is preceded by the ergative subjunctive connective -tga on the verb, t'aad 'to set' (the i in t'aaditga is an epenthetic vowel). As the sentence also shows, a third person pronominal suffix, -t, appears in preverbal position when there is a full NP A following the verb.

- (5) Ada la -t k'aag-asga n -ts'al-t -ga.
and PAST-3 open -CN POSS-eye -3 -DEM
 A PRED POSS
And he opened his eyes.

In (5), the O NP, nts'altga 'his eyes', immediately follows the verb and is marked with the absolutive subjunctive connective, -sga on the verb k'aag- 'to open' (the a in k'aagas- is also an epenthetic vowel).

- (6) Ada gyik loogak-sga n -lii-t.
and again wet -CN POSS-fur-3
 PRED POSS
And his fur was wet again.

The S NP, nliit 'his fur', in (6) is marked with the same subjunctive connective -sga on the verb loogak 'to be wet' as appears in (5). These three sentences illustrate that when the O NP immediately follows the verb, the O and S NPs

are marked alike and differently from the A NP. In other words, the full system of predicative connectives is an ergative system.

The differentiation between the indicative and the subjunctive connectives is shown by (6) compared to (7).

- (7) Da gwaant-ga 'wii gyisiyaask.
 Then blow -CN great northwind
 PRED
 Then the great northwind blew.

In (7), the S NP, 'wii gyisiyaask, 'great northwind', is marked by the indicative absolutive connective, -ga on the verb gwaant 'to blow', while in (6) the S NP is marked with the subjunctive form -sga.

Finally, the differentiation between the status relative to the speech act can be seen in (7), (8) and (9):

- (8) Smgal 'woomxg-ada txa'nii txamoo-t -ga.
 very be in -CN all body -3 -DEM
 pain PRED POSS
 His whole body was really in pain.
- (9) Da uks -haytg-a awta a n -dzoog
 then toward-stand-CN porcupine PREP POSS-edge
 water PRED
 Then porcupine stood at the edge of the water,
- a aks -t, a -t nii wil wuwaal lp .
 -CN water-DEM and-3 see that be REFLX
 POSS A
 and he saw how happy beaver
- ɬgusgüü-sga sts'ool da lax-aks -t.
 happy -CN beaver CN top-water-DEM
 PRED PREP
 was in the water.

In (7), -ga, the absent form of the absolutive indicative connective occurs; in (8), the S NP, txa'nii txamootga 'his

In (11) the verb dam 'to hold' is suffixed with the third person absolutive suffix, -t, and the absolutive indicative connective -ga which marks the O NP, tm'laani 'neck', while the A NP, sts'ool 'beaver', is marked with the ergative indicative connective -sga.

When the O NP does not occur immediately following the verb, however, the range of absolutive connectives that the O can appear with is restricted. The connectives that I have found are:

(12) Predicative Connectives (full)

	<u>common noun</u>			<u>proper noun</u>		
	<u>indef.</u>	<u>pres.</u>	<u>absent</u>	<u>indef.</u>	<u>pres.</u>	<u>absent</u>
O NP	-a	-da	-ga	-at	?	?

A comparison of the full range of absolutive connectives given in (3) with the restricted range given in (12) shows that when the O NP does not occur immediately after the verb, the predicative connectives marking the O do not make a distinction between indicative and subjunctive clauses.

Examples of some of the connectives in (12) occur in the following sentences:

- (13) Ha -'li-goot -sga awta -ga dza
 INSTR-on -heart-CN porcupine-CN weakens
 = thought PRED PRED clause
 Porcupine thought that
- la al dzak-sga sts'ool-ga.
 PAST EMPH dead-CN beaver -DEM
 PRED
 beaver was dead.

- (14) Da'al-t goo -tga awta -ga n -waap
 but -3 go to-CN porcupine-CN POSS-house
 A place PRED PRED
 But porcupine went to his den.
- t -ga.
 -3 -DEM
 POSS

In (13) the A NP, awta 'porcupine', is marked with the indicative ergative connective -sga on the verb ha'ligoot 'thought' and the O NP, dza la al dzaksga sts'oolga 'that beaver was dead', is marked with the connective -ga on the immediately preceding word, awta 'porcupine'. Note that within the O NP clause, sts'ool 'beaver' is an S and is marked with the subjunctive absolutive connective -sga. In contrast, in (14) the A NP, awta 'porcupine', is marked with the subjunctive ergative connective -tga on the verb goo 'to go to a place', but the O NP, nwaaptga 'his den', is still marked with the same connective -ga on the immediately preceding word, awta 'porcupine'. This illustrates that the O NP predicative connectives do not make a distinction between indicative and subjunctive clauses.

A comparison of (13) and (14) with (15) show that the O NP predicative connectives do, however, distinguish between a common noun and a proper noun O.

- (15) Wayi, la -t 'nisgatg-it gad -a awta
 well PAST-3 make fun-3 reported-CN porcupine
 A of O PRED
 Well, it is said that porcupine made fun of him.
- t 'niit-ga.
 CN 3SG -DEM
 PRED

In (15) the A NP, awta 'porcupine', is marked with the indefinite connective -a and the O NP, 'niit '3SG', is an independent pronoun and as such is marked with a proper noun connective -t on the immediately preceding word, awta 'porcupine' (the a of the connective has merged with the final a in awta). In Sm'algyax, independent pronouns are always treated as proper nouns, even when the referent, in this case, sts'ool 'beaver', is not treated as a proper noun, as sentences like (4) and (13) show.

Morphologically, the O NP predicative connectives are the same as the indicative absolutive connectives. Within the full set of connectives, we see that the ergative subjunctive forms are also similar to the indicative absolutive forms. The differences in the ergative subjunctive connectives occur in the common and proper noun absent forms where there is an initial -t- and the proper noun indefinite form where there is an initial -d-. The ergative indicative connectives also appear, for those forms that have been found, to be the same as the absolutive subjunctive forms. The significance of this apparent reversal of forms between the indicative absolutive and ergative markings and the subjunctive absolutive and ergative markings is not clear.

In terms of segmentability of the predicative connectives, we see that they can be divided into four segments with the absent proper noun ergative subjunctive form,

-tgat, being the only connective which includes all four segments. The four segments can be represented as:

(16) Segments within Predicative Connectives (full)

1	2	3	4
\emptyset = indic abs/ subjn erg* s = indic erg/ subjn abs *except: t = absent subjn erg	\emptyset = indefinite** d = present g = absent **except: d = indefinite proper N subjn erg	a	\emptyset = common noun t = indic abs/ subjn erg s = indic erg/ subjn abs
			} proper noun

where the first segment indicates the indicative/subjunctive and the absolutive/ergative distinctions; the second segment, the status of the referent with respect to the speech act; the third segment is the central part of the connective, the vowel a; and the fourth segment, whether the head of the noun phrase is a common or proper noun. Within the proper nouns there are also the same distinctions that are made in the first segment. While there are two exceptions, the rest of connectives are clearly able to be segmented and need not be considered as portmanteaux. •

There is one other observation about the predicative connectives that should be made before moving to the discussion of ergativity. As Boas (1911:362-3) has observed, the predicative connective becomes an -ḡ in negative (17), conditional (18) and interrogative sentences (19):

- (17) Ałga di haytg-ał waap asga gwasga-ga.
 not on its stand-CN house CN DEM -DEM
 part PRED PREP
 There was no house there.
 (Boas 1911:363)
- (18) Dzida siipg-ał haas, dm dzak-d-u.
 if sick -CN dog FUT kill-3-1SG
 PRED O A
 If a dog is sick, I will kill it.
 (Dunn 1979f:78)
- (19) Nah niidz-an -ił mediik?
 PAST see -2SG-CN grizzly
 A PRED bear
 Did you see the grizzly bear?

In each of these examples the predicative connective which is suffixed to the verb and marks the following NP is a -ł. (In each case it is preceded by an epenthetic vowel.) The significance of its appearance in these particular types of sentences is discussed in Section 2.7.2.

To return to ergativity, I have illustrated that the set of predicative connectives used in the more fully inflected style of speech make four different groupings of the S, O, and A NPs. In some cases, as in the indefinite common noun forms, no distinction is made between S/O/A. In other cases a two-way distinction is made which is either ergative (S/O:A), as in the present indicative common noun forms, or is neither ergative nor accusative (S:O/A), as in the subjunctive present common noun forms when the object is not next to the verb. And, in the last case, all three connectives have different forms (S:O:A), as in the subjunctive absent common noun forms when the object is not

next to the verb. The four different groupings can be summarized as in (20):

(20) Ergativity in the Predicative Connectives (full)

	<u>common noun</u>			<u>proper noun</u>		
	<u>indef.</u>	<u>pres.</u>	<u>absent</u>	<u>indef.</u>	<u>pres.</u>	<u>absent</u>
V + S/A/O						
indicative	Ø	E	E	E(?)	E(?)	E(?)
subjunctive	Ø	E	E	E	E	E
S/A						
V + { or						
A + O						
indicative	Ø	E	E	E(?)	E(?)	E(?)
subjunctive	Ø	T	3	3	T(?)	T(?)
where Ø = S/O/A				E = S/O:A		
3 = S:O:A				T = S:O/A		

A question mark appears in those cases where an example of one of the forms has not been found. However, a value has been determined by assuming that the missing form can be filled in on the basis of analogy with the appropriate forms that do occur.

As this chart summarizes, ergativity occurs in the full set of connectives in all but the indefinite forms or the subjunctive forms when the O NP is not immediately following the verb. In these non-ergative cases, however, the forms are not accusative. They either make no distinction, mark the S differently from the A and O, or mark all three NPs differently.

2.2.2.2 Reduced System of Predicative Connectives

The set of predicative connectives which I have observed in everyday speech and have been used consistently in

written materials prepared by the Sm'algyax Language Teachers is given in (21):

(21) Predicative Connectives (reduced)

	<u>common noun</u>	<u>proper noun</u>
S		-as
	} -a	
O		-at
A	-da/-a	-as/-dit

Examples of these connectives are illustrated in the following sentences:

- (22) ɬa dm ɬuuntii-s Matyu.
 about FUT be mad -CN Matthew
 -PRED
 Matthew is about to get mad.

- (23) Nah ts'lm -'wiihawtg-as Madzi da
 PAST into.from-cry -CN Margie CN
 side PRED PREP
 Margie came to my house crying.
 na -waab -u.
 POSS-house-1SG
 POSS

In (22), the proper noun S, Matyu 'Matthew', is marked with the proper noun connective -as on the verb ɬuuntii 'to be mad' (the a in the connective is deleted since it follows a final vowel in the verb), and in (23), the same connective marks the proper noun S, Madzi 'Margie', on the verb 'wiihawtg- 'to cry'. These two examples illustrate that there is no distinction made between indicative and subjunctive clauses in the connectives marking the S. This also holds true for the O. When these two sentences are compared to (24) we see, however, that the common noun/proper noun dis-

tion is maintained:

- (24) Yagwa hadiks-a sts'ool da ts'm t'aaks.
PRES swim -CN beaver CN in pond
 PRED PREP
A beaver is swimming in the pond.

In (24), the S, sts'ool 'beaver', is marked with the connective -a on the verb hadiks 'to swim', as opposed to the connective -as which occurs in (22) and (23).

Unlike the full set of predicative connectives, the reduced set does not differentiate between whether the O is following the verb as in (25) or the A as in (26):

- (25) Ła -t k'yilum-dit Dzodz -a baaysik das
PAST-3 give -CN George-CN bicycle CN
 A PRED PRED PREP
George gave a bicycle to John.

Dzon.
John.

- (26) Nii in -t snyaawgw-a hagwilhuu.
DEM TOP-3 hold in -CN line
PRON A hand PRED
He was the one who was holding the line in his hand.

The same connective, -a, marks the O, baaysik 'bicycle', on the A, Dzodz 'George', in (25) and the O, hagwilhuu 'line' on the verb snyaawgw- 'to hold in hand' in (26).

In contrast to the connectives marking the S and O, those marking the A are conditioned by the tense/aspect of the sentence that the noun phrase occurs in:

- (27) Nah xbeexs-as Dzon lak da ha -xbeexsg
PAST cut -CN John wood CN INSTR-saw
 PRED PREP
John has cut the wood with a saw.

-a -hooyd. (E)
 -CN -use
 ADJ

- (28) la -t k'oots-dit Ami wan da hałabiisk. (E)
 PAST-3 cut -CN Amy deer CN knife
 A PRED PREP
 Amy was cutting the deer with a knife.

In (27), the tense/aspect of the sentence is signalled by nah 'PAST' (perfective aspect) and the A, Dzon 'John', is marked with the connective -as on the verb xbeexs 'to cut (wood)' whereas in (28), the tense/aspect marker is la 'PAST' (imperfective aspect), and the A, Ami 'Amy' is marked with the connective -dit on the verb k'oots 'to cut'. The division of tense/aspect particles into those which occur with -da versus those which occur with -a is not the same as the division between those which occur with -as versus -dit. And neither division is the same as the indicative/subjunctive division found with the full set of predicative connectives. A detailed discussion of the tense/aspect system in Coast Tsimshian is given in Section 2.6, along with details of the three different divisions made by the various predicative connectives. *

Two other connectives, -at and -dis, occur in some simplified legends which have been written by the Sm'algyax Language Teachers to be used as easy primary level readers. In the first case, -at is a proper noun connective marking the S when it occurs in indicative clauses while, -as is used to mark the S in subjunctive clauses. These two connectives are the same as the indicative and subjunc-

tive indefinite forms for absolutive proper nouns given in (3).

The second connective found in the simplified legends, -dis, is a proper noun connective marking the A. The other proper noun connective marking the A in these simplified legends is -as. To determine the difference in the use of -dis and -as it is relevant to consider the tense/aspect of the sentence, and then to compare these two connectives with the corresponding connectives in the full set of predicative connectives. Now, in all of the examples with either -dis or -as there is no overtly marked tense/aspect, and in the fully marked forms of legends told in the oratory style of speech, nouns in sentences without an overtly marked tense/aspect are marked with indicative connectives. In both the simplified legends and the full legends, these sentences are translated with a past tense in English. It would appear, then that -dis and -as correspond to indicative ergative connectives marking different locations of the noun with reference to the speech act. Based on analogy with the one indicative ergative proper noun connective, -s, and the subjunctive absolutive proper noun connectives, -at 'indefinite', -dat 'present', and -gat 'absent', given in (3), -as marks the indefinite or absent, while -dis marks the present.³

With the reduced set of predicative connectives, some of the connectives do not occur in the most casual types of

speech. Occasionally the common noun connective for O does not occur, while the common noun connectives for A frequently do not occur:

- (29) Yagwa-t k'yilum-da hana'a bilhaa das
 PRES -3 give -CN woman abalone CN
 A PRED PREP
 The woman is giving her mother some abalone.

noo -t.
 mother-3
 POSS

- (30) Nah k'yilum hana'a bilhaa das noo -t.
 PAST give woman abalone CN mother-3
 PREP POSS
 The woman gave her mother some abalone.

In (29), the common noun connective -da marks the A, hana'a 'woman' on the verb k'yilum 'to give' (the -a connective for the O, bilhaa 'abalone' merges with the final a of hana'a 'woman'). In (30), however, no connective appears on the verb k'yilum 'to give'. In the data which I have collected, the common noun connectives marking A must be present with the present tense, yagwa, but are optional with any of the other tenses.

Morphologically, the reduced set of predicative connectives in Sm'algyax is directly related to the full set given in (3). With the exception of the common noun A connective -da, all of the reduced forms are related to the indefinite forms in the full set: the common noun connective -a is the same in both sets, while the proper noun S connective is the same as the absolutive subjunctive connective and the proper noun O connective is the same as the abso-

lutive indicative connective. Based on analogy, the proper noun A connective -as is related to the indicative ergative form and the proper noun A connective -dit is related to the subjunctive ergative form. The one exception, the common noun A form -da, appears to be the same as the present ergative subjunctive connective.

Looking at the internal structure of the connectives given in (21) we can see that, like the full system of predicative connectives, the reduced set can be segmented. There are three segments, with the proper noun A form -dit being the only connective which includes all three segments. The three segments can be represented as:

(31) Segments within Predicative Connectives (reduced)

	1	2	3
<u>common noun</u>	\emptyset = S, O, or A in past tense d = A in nonpast tense		\emptyset = S, O, A
<u>proper noun</u>	\emptyset = S, O, A d = A in some nonpast tenses	a	s = S, A t = O or A in some nonpast tenses

However, unlike the full set of predicative connectives, the complexity of the tense/aspect conditioning of the connectives marking As makes it very cumbersome to segment the reduced set of connectives. It would suggest, instead, that this set of predicative connectives should be consid-

ered as portmanteaux.⁴

Finally, to return to the discussion of ergativity, I have illustrated that the reduced set of predicative connectives make four different groupings of the S, O, and A NPs. In some cases, as in the common noun forms when the A is marked with -a, no distinction is made among S/O/A. In other cases a two-way distinction is made which is either ergative (S/O:A) as in the common noun forms when the A is marked with -da, or is accusative (S/A:O) as in the proper noun forms when the A is marked with -as. And, in the last case, all three connectives have different forms (S:O:A) as in the proper noun forms when the A is marked with -dit. The four different groupings can be summarized as in (32):

(32) Ergativity in the Predicative Connectives (reduced)

	<u>common noun</u>	<u>proper noun</u>
A = -a/-as	∅	A
A = -da/-dit	E	3
	where ∅ = S/O:A	E = S/O:A
	3 = S:O:A	A = S/A:O

As this chart summarizes, ergativity occurs in the reduced set of connectives in the common noun forms when the A is marked with -da. An accusative system occurs in the proper noun forms when the A is marked with -as. In the other two cases, the forms are neither ergative or accusative: they either make no distinction or mark all three NPs differently.

2.2.3 Possessive Connectives

In possessive noun phrases, the word order is Possessed-Possessor, a connective is suffixed to the first noun, and, unless it is something that is considered to be an inseparable part of the possessor,⁵ the possessed noun is marked with the prefix na- (which comes before the plural prefix if one is present):⁶

- (33) Na -yaa -s Sammy gwa'a.
 POSS-grand -CN DEM
 father POSS
 This is Sammy's grandfather.

What is of interest in terms of ergativity is the connective. As with the predicative connectives, the choice of possessive connective depends on whether the following noun is common or proper, and, in the more fully inflected styles of speaking, on whether, in Boas' terms, the noun phrase is in an indicative or subjunctive clause, and whether a common noun possessor is indefinite, present or absent. The full range of connectives recorded by Boas (1911:360) are:

- (34) Possessive Connectives (full)⁷

		<u>common noun</u>			<u>proper noun</u>
		<u>indefinite</u>	<u>present</u>	<u>absent</u>	
indicative	}	-a	-da	-ga	}
subjunctive			-sda	-sga	
					-s

Examples of some of the possessive connectives from texts I have collected follow:

are the same as the indefinite common noun and the proper noun forms of the full system. This reduction of the simplified system to the indefinite forms of the full system in the possessive connectives is the same as the reduction in the predicative connectives.

To return to the discussion of morphological ergativity in Sm'algyax, we see that the possessive connectives, like the predicative connectives, are sensitive to the type of clause that they appear in, they distinguish the location of the head of the noun phrase with respect to the speech act, and, even in the simplified system, they differentiate between common and proper nouns.

2.2.4 Prepositional Connectives

The general preposition, a, and prepositional connectives occur in sentences which contain an indirect object, or an instrumental, benefactive, locative or temporal phrase. In the example below, da, a preposition + connective form, precedes the locative phrase, ts'alt 'her face':

- (41) Galiimks-id-a yuup da ta'sl-t. .
 throw -3 -CN dirt CN face-3
 A PRED PREP POSS
 He threw dirt in her face.

What is of interest in terms of ergativity, is that like the predicative and possessive connectives, these connectives indicate whether the object of the prepositional phrase is a common or proper noun, and, in the more fully inflected styles of speaking, whether its location is in-

smgal 'wii-gatgyet-ga.
very very-strong -DEM
because he is very, very strong.

In (43), the indefinite proper noun preposition and connective, as, precedes 'niit '3SG'. As noted in Section 2.2.2.1, independent pronouns in Sm'algyax are marked with the proper noun connectives. This happens even though the referent, 'wii mediik 'great grizzly bear', is not marked with proper noun connectives, as in (45). Here the predicative connective on 'nisagootg 'mind' is the common noun form, a, not the proper noun form, -dat. The preposition and connective in (44) is da, marking the present common noun sganiis 'mountain' in an indicative sentence and in (45) the relevant connective is gas, the proper noun absent form marking 'niit '3SG'.

Morphologically, the prepositional connectives, like the possessive connectives, are similar to the full set of absolutive predicative connectives given in (3) in Section 2.2.2.1. For example, the indicative common noun forms are identical with the predicative indicative common noun forms. Similarly, when the preposition a is segmented from the possessive subjunctive common noun connectives -sda and -sga in the present and absent forms, respectively, the possessive subjunctive common noun forms are identical with the predicative subjunctive absolutive connectives. The proper noun prepositional connectives appear to be a combination of the common noun indicative prepositional forms

(i.e. the common noun absolutive indicative forms) and the suffix -s which is the same as the absolutive proper noun indefinite or absent connective. As with the reduced predicative connectives and the possessive connectives, the significance of this correlation with the full set of absolutive predicative connectives is unclear.

The indicative and subjunctive common noun prepositional connectives also occur in contracted forms with the demonstratives di- and qi-:

	<u>present/near</u>	<u>absent/distant</u>
indicative	dida	giga
subjunctive	disda	gisga

(47) Ada wil sa -'oks-t gi -sga lax yuup -ga.
and then sudden-fall-3 DEM-CN top earth-DEM
S PREP
Then he fell on the ground.

(48) Preposition + Connective (reduced)¹⁰

common noun da

proper noun das

These two connectives are illustrated in the following examples:

- (49) da dm kag -a sahoon da galts'ap
 about FUT open-CN food CN village
 PRED fish PREP
 Food fishing is about to open now for the

 dza gya'wn.
 weakens now
 sentence₁₁
 village.

- (50) Nah dzab-as Ronnie pts'an das Dick.
 PAST make-CN totem CN
 PRED pole PREP
 Ronnie has fixed a totem pole for Dick.

The common noun preposition and connective, da, precedes galts'ap 'village' in (49), while the proper noun form precedes Dick in (50).

In summary, the prepositional connectives, like the possessive and predicative connectives, are sensitive to the type of clause they appear in, and distinguish between common and proper nouns and the location of the object of the preposition.

2.3 Personal Pronouns

There are three types of personal pronouns in Coast Tsimshian: dependent pronouns, which are clitics on the verb; possessive pronouns, which occur as suffixes on the

possessed noun; and independent pronouns, which function as lexical NPs. Each of these types is relevant to the discussion of ergativity and will be examined in detail in the following sections.

First, however, I will discuss the kinds of distinctions that these three types of pronouns make. Morphologically, three persons are distinguished in all three types of personal pronouns. With respect to number, a singular-plural distinction is made in all three persons in the independent pronouns, whereas a singular/plural distinction is only made in the 1st and 2nd person with dependent and possessive pronouns. Syntactically, the choice of a dependent pronoun, like that of a connective, depends on what type of clause the pronoun occurs in, that is, whether it is in an indicative or a subjunctive clause. In indicative clauses with an A and O, the choice is further dependent on the semantic nature of the argument, in terms of 1st, 2nd, 3rd or lexical NP relative to the other argument in the clause, and what the syntactic role of the argument is in the clause (i.e., is it an A, O or S). The possessive and independent pronouns are much more straight-forward, as their choice is only dependent on the person and number of the pronoun and, with the independent pronouns, on whether the pronoun is a direct argument (i.e., A, O or S) or an oblique argument such as an indirect object.

2.3.1 Dependent Pronouns

In Coast Tsimshian there are three sets of personal pronouns which are 'dependent' in that they occur as clitics on the verb. The terms which Boas (1911) uses for the two sets that he distinguishes are subjective and objective. Dunn (1979d) has identified a third set which he terms definite objective. I will adopt their terminology here.¹² The three sets of dependent pronouns are given in (51):

(51) Dependent Pronouns

	<u>subjective</u>		<u>objective</u>		<u>definite objective</u>	
	<u>SG</u>	<u>PL</u>	<u>SG</u>	<u>PL</u>	<u>SG</u>	<u>PL</u>
1	-n-	-dp-	-u	-m	-'nu	-'nm
2	-m-	-m-...-sm-	-n	-sm	-n	-'nsm
3		-t-		-t		-t

The subjective series of pronouns occur as preverbal proclitics while the objective and definite objective series occur as enclitics on the verb, as schematized in (52):

(52) Position of Dependent Pronouns

subjective: $\left\{ \begin{array}{c} 1 \\ 2\text{SG/PL} \end{array} \right\} + \text{T/A} + \left\{ \begin{array}{c} 2\text{PL} \\ 3 \end{array} \right\} \text{ V} \quad .$

objective/definite objective: T/A V + ProN

With the subjective pronouns, the third person and the -sm of the second person plural occur after the tense/aspect particles, while all the other forms precede them. Some examples follow:

- (53) N -dm man-gad -n.
 1SG-FUT up -take-2SG
 A O
 I will take you up.
- (54) Ea wila diduuls-u.
 PAST be alive -1SG
 S
 I am still alive.
- (55) Dm al tgyi ksgooga -'nu.
 FUT but down be first-1SG
 S
 I'll go down first.

In (53) the A, n- '1SG' is a subjective pronoun and precedes the tense, dm 'FUT', while the O, -n '2SG' is an objective pronoun and is suffixed to the verb. The S in (54) and (55) is the 1st person singular and is an objective pronoun in the former but a definite objective pronoun in the latter.

Before discussing the syntactic use of the three sets of pronouns, there are a number of morphological points that should be noted. First, the third person form is the same for singular or plural and for all three series of pronouns. Its placement either before the verb or as a suffix on the verb, however, distinguishes whether it is a subjective or (definite) objective pronoun. Next, the first person plural subjective form, -dp-, is a plural form of much wider use. For example, it is used to express the plural of demonstrative pronouns such as dp gwa'i 'those'; as we shall see in Section 2.3.3, it distinguishes the third person plural independent pronoun, dp 'niit '3PL', from the

singular, 'niit '3SG'; it is also used to mark an NP with conjoined nouns, as in the following example:

- (56) Yagwa bus -laxs-da dp Allen di -s Tom. (E)
 PRES chop-wood-CN PL and-CN
 PRED NP
 Allen and Tom are chopping wood.

It should also be noted that there is a similarity between the 2nd person plural in the subjective and objective series in that -sm- distinguishes the 2nd person singular, -m-, from the 2nd person plural, -m-...-sm-, in the subjective series and is the sole marker of the objective series 2nd person plural suffix, -sm.

Finally, the definite objective series of pronouns are composed of -'n- and the objective series of pronominal suffixes. The definite objective series is only differentiated from the objective series in the first person singular and plural and the second person plural. As we shall see in Section 2.3.3, the -'n- element also occurs in independent pronouns and is present in the sentence-initial demonstrative pronoun ni'nii 'that be (the one)'. Because of these connections, Dunn (1979d:226) interpretes the -'n- as a deictic unit or determiner with a definite meaning and notes that, in a phonological sense, the definite objective pronouns are contractions of the independent pronouns.¹³

In his analysis of the different dependent pronominal systems in Caost Tsimshian, Boas only distinguished the subjective and the objective series as presented above in

(51). He then added that in the indicative mood if the object is a third person pronoun, the transitive verb takes an indicative suffix, either -n or -d (Boas 1911:385). However, like Dunn (1979d:225), I have found in my data that the -d element can usually be analyzed as a predicative connective or as a third person pronominal. With a few lexical items such as dzak 'to die, to be dead' and dzak(d)- 'to kill', I think the -d can be analyzed as a transitivizing suffix that, when it occurs, specifically marks the change of an intransitive verb into a transitive verb. With the -n, Boas (1911:347) concludes that it designates the indicative and appears only preceding the suffixes of the first person singular and plural and the second person plural forms of the dependent pronouns marking S and O. A simpler and more straightforward approach is to analyze the -n as part of a third series of dependent pronouns, as Dunn (1979d) has argued.

Turning now to the syntactic use of the three series of dependent pronouns, I will begin with the subjunctive. Here, the A is marked with the subjective series of pronouns and the O and S are marked with the objective series. This holds true regardless of whether the A and O are both dependent pronouns or whether one of them is a lexical NP:

- (57) Ada wil m way -u.
 and then 2SG find-1SG
 A O
 Then you (SG) found me.
 (Boas 1911:384)
- (58) Daał, meł-a hasag-ayu da dm -t bax
 dear say-CN want -1SG CN FUT-3 up along
 PRED S PREP A ground
 My dear, say that I wish [for] my son-in-law
- good -a łams -u mati hu-waald-a
 -go to -CN son.in-1SG mt. PL-be -CN
 place -PRED law POSS goat PRED
 (trans)
 to go up for the mountain goats there in the
- da gyilhawli, a wul n k'oomtg-a sami
 CN woods because 1SG desire -CN meat
 PREP A PRED
 woods, because I desire mountain goat
- m mati di -ł yeey-a mati.
 -CN mt. and-CN fat -CN mt.
 ADJ goat NP ADJ goat
 meat and mountain goat tallow.
 (Boas 1912:88)

In (57), which is a subjunctive clause due to the preverbal elements, ada wil 'and then', the A -m '2SG', is a subjective pronoun and the O, -u '1SG' is an objective pronoun. That the S also occurs as an objective pronoun in a subjunctive clause is illustrated in (58). Here within the embedded clause hasagau da dmt baxgooda łamsu mati huwaalda da gyilhawli 'I wish [for] my son-in-law to go up for the mountain goats there in the woods' the S of the verb, hasag- 'to want' is a 1st person pronoun and is in the objective form. (The -a- in -ayu '1SG' is an epenthetic vowel and the -y- occurs before the -u '1SG' because the addition of the epenthetic vowel causes the stem to end in a vowel.)

objective dependent pronoun, -u '1SG'.

To summarize then, with dependent pronouns in the subjunctive clauses, an A occurs in a subjective dependent pronoun form while an O or S occurs in an objective dependent pronoun form.

In the indicative, the S appears in the definite objective while the A appears in either the subjective or objective and the O appears in either the objective or definite objective as is schematized in (61):

(61) Dependent Pronouns in Indicative Clauses

A	subjective/objective
O	objective/definite objective
S	definite objective

The choice of dependent pronoun for the A or the O depends on the semantic nature of the argument, its relation relative to the other argument, and its syntactic role in the sentence. The various relationships between the arguments can best be expressed in an 'argument hierarchy'. The central feature of such a hierarchy is that the first and second persons outrank third person, which outranks lexical NPs. This type of hierarchy, which has also been termed an 'agent hierarchy' or 'animacy hierarchy', was originally identified by Silverstein (1976). A ranking of the elements in the hierarchy is determined by such things as splits between ergative, accusative and neutral case marking systems and by constraints on argument combinations when certain A/O combinations are excluded. Such hierarch-

ies have been found to hold in languages such as Cashinawa (Peru) and Dyirbal (Dixon 1979), and the Salish languages (Jelinek and Demers 1981, 1983; Gerdts 1983; Kinkade 1984), to name but a few.

In Sm'algyax, it is important, in determining whether the O outranks the A, to know whether both are third person, or, if the A outranks the O, whether the O is a third person or a lexical NP. The various combinations of the three sets of dependent pronouns that are found are quite complex and can perhaps best be understood in chart form. In (62)-(64), the rows are the various forms of the A, the columns the various forms of the O and an entry of - indicates that the combination is not possible. The first chart, (62), shows whether the A occurs in the subjective or objective form depending on the O.

(62) Distribution of Dependent Pronouns for A

A \ O		1		2		3	NP
		PL	SG	PL	SG		
1 {	PL	-	subjective			objective	
	SG						
2 {	PL			-			
	SG				-		
3							

The second chart, (63), shows whether the O occurs in the objective or definite objective form depending on the A.

(63) Distribution of Dependent Pronouns for O

A \ O		1		2		3
		PL	SG	PL	SG	
1 {	PL		objective		(definite) objective	
	SG					
2 {	PL		definite objective		-	
	SG					
3	NP					

The third chart, (64), is the result of superimposing (62) on (63) and gives the various combinations of dependent pronoun forms that occur marking A and O:

(64) Distribution of Dependent Pronouns for A and O

A \ O		1		2		3	NP
		PL	SG	PL	SG		
1 {	PL		A=subj O=obj		A=subj O=(def) obj	A=obj O=obj	A=obj O=NP
	SG						
2 {	PL		A=subj O=def obj		-		
	SG						
3	NP						
		A=NP O=def obj		A=NP O=(def) obj		No ProN	

In the area above the diagonal line in (65) the A outranks the O, and this is indicated by an A, while in the area below the diagonal line the O outranks the A, and this is indicated by an O. When both the A and O are third person, they are equal on the argument hierarchy and this is indicated by an =:

(65) Relative Ranking of A and O

A \ O		1		2		3	NP
		PL	SG	PL	SG		
1 {	PL		A	A	A	A	A
	SG	O		A	A	A	A
2 {	PL	O	O		A	A	A
	SG	O	O	O		A	A
3		O	O	O	O		A
NP		O	O	O	O	O	No ProNs

A comparison of (65) with (62)-(64) shows that if O outranks A then the O occurs in the definite objective form (where it is differentiated from the objective form), whereas if A outranks O then the A occurs in the subjective and the O in the objective, unless the O is 3rd person or an NP, in which case the A is in the objective. If the A and O are equal, then the A is in the subjective and the O is in the objective.

The result of this rather complex distribution of the three series of dependent pronouns over the A and O is that it is always clear in a sentence whether the dependent pronoun refers to an A or an O. The only time both arguments appear in the same series is when the O is 3rd person and the A is a 1st or 2nd person. In this case, however, there is no ambiguity either, due to the constraints on the person of the A and O.¹⁴

Examples of some of the various combinations of A and O with the different series of dependent pronouns follow:

- (66)a. Dm k'yeexg -a'nu.
 FUT run awaay-1SG
 S
 I am going to run away.
- b. 'Wiileeks-a'nu ada amap'aas -a'nu.
 big -1SG and beautiful-1SG
 S S
 I am big and beautiful.

In (66a and b), the S is 1st person singular and occurs in the definite form, -'nu. (In each case, the -a- before -'nu is an epenthetic vowel.)

The next two sentences illustrate the difference in the form of the dependent pronouns when the A outranks the O as in (67a and b) and when the O outranks the A as in (68a and b).

- (67)a. N siipn-sm.
 1SG love -2PL
 A O
 I love you (PL).
- b. N -m ɬümoom-sm.
 1SG-FUT help -2PL
 A O
 I'll help you (PL).

In (67a and b), the A is 1st person singular and in the subjective while the O is 2nd person plural and in the objective. (In (67b), n-m '1SG-FUT' is a contraction of n+dm.)

- (68)a. M ay-'ooy-i'nm.
 2SG PL-hit -1PL
 A O
 You (SG) have hit us.
 (Boas 1911:385)
- b. T ap'ag -a'nu.
 3 remember-1SG
 A O
 He remembered me.
 (Dunn 1979d:225)

In (68a and b) the A is 2nd person singular and 3 person, respectively, and in the subjective, while the O is 1st person plural and 1st person singular, respectively, and in the definite objective.

In the next example, both the A and the O are objective pronouns.

(69)a. Ap'ax -d-u.
remember-3-1SG
O A
I remembered him.
(Dunn 1979d:225)

b. "Dm waal-u -t," daya-ga awta.
FUT do -1SG-3 say -CN porcupine
A O PRED
"I will do it," said porcupine.

In (69a) the O precedes the A whereas in (69b) it follows the A. As both pronouns can only be in the objective if the O is 3rd person, however, there is no ambiguity as to the meaning of each sentence.

In the final two examples, one of the arguments is a NP.¹⁵

(70) Dm gyeb-u aks.
FUT get -1SG water
A
I'll get water.

(71) T waay-i'nu haas-it.
3 find-1SG dog -DEM
A O
The dog found me.
(Boas 1911:385)

The 1st person singular is an A in (70) and is in the objective form, but in (71) it is an O and is in the definite objective form. (The 3rd subjective pronoun in (71) marks

agreement with the NP, haas 'dog'.)

The two-way division of the dependent pronouns into an indicative or a subjunctive configuration as presented so far is an oversimplification. Between these two there are many intermediate configurations which are determined by the tense/aspect of the sentence and, in transitive sentences, by the relative ranking of the A and O. A detailed discussion of the tense/aspect system in Coast Tsimshian is given in Section 2.6 along with details of the different intermediate configurations of the dependent pronouns.

There is one other observation which should be made here before moving to the discussion of ergativity. As Boas (1911:387) has observed, when the 1st person singular objective pronoun occurs in a clause in which the event is conceived as unreal, it has the form -i instead of -u. This happens in negatives (72), sentences expressing potentiality but with reference to the unreality of the event (73), and conditional clauses (74). I have also observed the -i form in imperatives (75):

- (72) Aayn, ałga-di hasaag-i, a wil ałga-di
no not -on.my want -1SG and then not -on.my
part S part
No, I do not want to, as I do not swim.

huk-hadiks-i.
one-swim -1SG
who S

In (72), there are two negative clauses, ałgadi hasaagi 'I do not want to' and a wil ałgadi hukhadiksi 'as I do not

clause where the 1st person singular is an S it is an -i suffix on the verb, ts'iin 'to enter', whereas in the then-clause it is an A and is in the subjective which is an -n- before the tense and verb dm sadagayna 'will fall with something'.

- (75) Bümoom-i.
 help -1SG
 O
 Help me.

In the final example, (75), the A, the addressee of the imperative is not overtly expressed and the O, 1SG, is -i. The significance of the appearance of the 1st person singular indicative as -i rather than -u) in these particular types of sentences is discussed in Section 2.7.2.

To return to ergativity, I have illustrated that the three series of dependent pronouns make three different groupings of the S, O, and A NPs. In some cases, a two-way distinction is made which is ergative (S/O:A), as in the subjunctive or in the indicative when the O outranks the A and the O and S are in the definite objective and the A is in the subjective. In other cases, a two-way distinction is made which is neither ergative nor accusative (S:O/A), as when the O is 3rd person and in the (definite) objective and the A is 1st or 2nd person and is also in the objective. As noted above, however, in this case the restrictions of the person of the A and O disambiguates the sentence. And, in the last case, all three connectives have

different forms (S:O:A), as when the A is a 1st person and the O is 1st SG or 2nd PL and the A outranks the O. In this case the A is in the subjective and the O is in the objective. The three different groupings can be summarized as in (76):

(76) Ergativity in the Dependent Pronouns

Subjunctive:

A = subjective
O/S = objective } S/O:A = ergative

Indicative:

S = definite objective
A = subjective or objective
O = objective or definite objective

Ergativity Summary:

A \ O		1		2		3
		PL	SG	PL	SG	
1 {	PL	3			E	-
	SG					
2 {	PL		E			
	SG				-	
3						

where E = S/O:A
- = S:O/A
3 = S:O:A

As this chart summarizes, ergativity occurs in the dependent pronouns in all but the indicative when the A is a 1st person and the O is a 1st person or 2nd person plural and when the A is a 1st or 2nd person and the O is a 3rd person. In these non-ergative cases, however, the forms are

The possessive suffix in (79) is 1st person singular, -u, in hak'o 'back'. (A -y- is added since hak'o 'back' ends in a vowel.) In (80), the possessed noun, wüliil 'eye(s)' is marked with the third person possessive suffix, -t, and the possessive prefix, na-.

Like the 1st person singular objective pronoun, the 1st person possessive suffix -u sometimes occurs as -i. This occurs in vocatives (81) and in those types of sentences where the 1st person singular objective pronoun takes the -i form, i.e., in negative sentences (82), sentences expressing potentiality but with reference to the unreality of the event (83), conditional clauses and imperatives:

- (81)

łgüüłg-i	noo	-i	nagwaad-i
child -1SG	mother-1SG		father -1SG
POSS	POSS		POSS
My child!	My mother!		My father!
	(said by girl)		

(Boas 1911:387)

- (82)

Alga-di	łgüüłg-i	das	'niit.
not -on	baby -1SG	CN	3SG
own	POSS	PREP	
part			

It is not my baby.

- (83)

Ap'ax	-di	a	n	dza	ła	txal	-waa
remember-on	PREP	1SG	if	PAST	against-meet		
own		A					
part							

I might remember when I met my child.

-sda łgüüłg-i -da.
-CN child -1SG -DEM
PRED POSS
(Boas 1911:388)

The significance of the appearance of the 1st person poss-

essive suffix as -i rather than -u is these particular types of sentences is discussed in Section 2.7.2.

What is of interest in terms of ergativity is the form of the possessive suffix. As (84) illustrates a comparison with the dependent pronouns in Section 2.3.1 shows that the forms for the possessive suffixes are the same as for the objective dependent pronouns which are suffixed to the verb and mark S and O in subjunctive clauses and A or O in indicative clauses depending on the relation of the two arguments relative to each other.

(84) <u>Possessive Suffixes</u>			<u>Objective Dependent ProNs</u>		
	<u>SG</u>	<u>PL</u>		<u>SG</u>	<u>PL</u>
1	-u	-m	1	-u	-m
2	-n	-sm	2	-n	-sm
3	-t		3	-t	

Typologically, Coast Tsimshian is somewhat unusual in this respect. Allen (1964):343) has found that:

In a variety of languages a connexion is clearly established between the expression of the subject, more particularly the transitive subject, and of 'possession' or 'acquisition', the connexion being in some cases limited to perfect or perfective forms of the verb. The modes of expression differ widely, but serve only to emphasize the underlying parallelism of the phenomena.

For example, in Old Persian, Greek, Latin and classical Armenian, the case used to mark the subject of transitive perfect sentences is the same as that used to mark possessive noun phrases or for predicating possession. In other lang-

uages, the correlation between the transitive subject and the marking of possession is not restricted to the perfective. In Abaza, there is a system of prefixes referring to a pronominal S or O, and a system of infixes referring to a pronominal A which is identical to the system of possessive prefixes.

With respect to ergativity, the connection between the marking of the A and a possessor is a possible typological correlate of morphological ergativity since it distinguishes As from Ss and Os.

In Sm'algyax, the possessive suffixes are identical with the objective suffixes that, in some instances, mark the A in the indicative. As was mentioned in Section 2.1, and is discussed in more detail in Section 2.7 below, the indicative includes sentences which are in the past perfective tense/aspect, marked with nah. In this regard, Sm'algyax fits with Allen's findings. However, the objective suffixes mark the S and O in the subjunctive and, in some instances, also the O in the indicative. According to Allen's findings this is typologically unusual. As was summarized in the chart in (76) in Section 2.2.1, though, the objective dependent pronouns along with the other two series of dependent pronouns respect ergativity in all but the indicative when the A is a 1st person and the O is a 1st person or 2nd person plural and when the A is a 1st or 2nd person and the O is a 3rd person. In these non-ergative

tive cases, however, the forms are not accusative, as they either mark all three arguments differently or the S is marked differently from the A and O. Thus, Coast Tsimshian is typologically unusual with respect to the observed cross-linguistic connection between the marking of the A and the marking of possession.

2.3.3 Independent Pronouns

For the first and second person, there are two series of independent pronouns in Sm'algyax: the first which occurs as the S, A, or O and the second which occurs as the indirect object.

(85) Independent Pronouns

	<u>S/A/O</u>		<u>Indirect Object</u>	
	<u>SG</u>	<u>PL</u>	<u>SG</u>	<u>PL</u>
1	'nüüyu	'nüüm	k'oy	k'wam
2	'nüün	'nüüsm	k'wan	k'wasm
3	← 'niit		dp 'niit	→

In actual speech, the first set of independent forms are not expressed in the great majority of sentences as the dependent pronoun clitics on the verb are generally sufficient. When they do occur these independent pronouns are used for emphatic contrastive reference as in (86b) as opposed to (86a), in equational sentences such as (87), and in sentence-initial position as in (86b), (88), and (89):

- (86)a. Hooy-u gantamiis. (E)
 use -lSG pencil
 A
 I am using the pencil.
 (emphasis, if any, on pencil)

- b. 'Nüüyu in hooy gantamiis.
 1SG TOP use pencil
 A
 I am the one using the pencil.
 (emphasis on I)
- (87) Egu ts'uusk-m wütsiin 'nüüyu.
 little little -CN mouse 1SG
 ADJ
 I am a little mouse.
- (88) 'Nüüyu nah algyag-a da sm'algyax.
 1SG PAST speak -CN CN Coast Tsimshian
 S PRED PREP
 I was speaking Sm'algyax.
- (89) Ada-t 'nüüyu nah niidz-a ol. (E)
 and-3 1SG PAST see -CN bear
 A PRED
 I'm the one the bear saw.
- (90) K'yilaam-t la'ask da k'oy.
 give -3 seaweed CN 1SG
 A PREP
 She gave the seaweed to me.

Regardless of the type of sentence, the same form, 'nüüyu '1SG', occurs as the A (86b), the S (88) or the O (89) while the indirect object form, da k'oy '1SG', in (90) differs.

Morphologically, the independent pronouns are composed of a root plus the objective series of suffixes which mark the S and O in subjunctive clauses and A and/or O in indicative clauses. For the A/S/O series of independent pronouns, as was noted in Section 2.3.1, the 'n of the roots 'nüü- and 'nii occurs in the definite objective series of dependent pronouns, and the same element is also present in the demonstrative pronoun ni'nii 'that be (the one)' which occurs in sentence-initial position. For the indirect

object series of independent pronouns, the root is k'wa-. (I am unaware of other occurrences of this morpheme.) The third person singular and plural are the same in both series. Finally, dp is the same marker as found in the first person plural in the subjective series of dependent pronouns. As was noted in Section 2.3.1, dp is a plural marker of much wider use; for example, it is used to express the plural of demonstrative pronouns and in NPs with conjoined nouns.

In Coast Tsimshian, as was illustrated in Sections 2.2.2.1 and 2.2.3, the independent pronouns are always treated as proper nouns and, as such, are always marked with proper noun connectives. This holds even when the referent is not treated as a proper noun when it appears as a full NP. For example, in (15), repeated here as (91), the O, 'niit '3SG', is an independent pronoun and is marked with a proper noun connective -at on the immediately preceding word, awta 'porcupine' (the a of the connective has merged with the final a in awta). However, when (19) is compared with (13), repeated here as (92), we see that sts'ool 'beaver', the referent of 'niit '3SG', is not treated as a proper noun, but instead, is marked with the common noun connective -sga on the verb dzak 'to be dead'.

- (91) Wayi, la -t 'nisgatg-it gad -a awta
 well PAST-3 make fun-3 reported-CN porcupine
 A O PRED
 Well, it is said that porcupine made fun of him.

-t 'niit-ga.
 -CN 3SG -DEM
 PRED

(92) Ha -'li-goot -sga awta -ga dza
 INSTR-on -heart-CN porcupine-CN weakens
 = thought PRED PRED clause
 Porcupine thought that

la al dzak-sga sts'ool-ga.
 PAST but dead-CN beaver -DEM
 PRED
 beaver was dead.

To summarize, with respect to ergativity, the examples given in this section illustrate that the independent pronouns in Sm'algyax have the same form irrespective of whether they function as an A, S or O within a clause. Because no distinctions are made, they are neither ergative nor accusative.

2.4 Person Agreement

In many languages bound pronominal affixes occur not only as noun substitutes, but also occur when the co-referent NP is present. That is, the bound pronominal affixes express not only anaphoric pronominalization but also grammatical agreement. The following examples from Swahili illustrate this (Givon 1984:363):

- (93)a. A -na -kula [^]mkate.
 3SG -PROG-eat bread
 ANIM
 She/he is eating bread.
- b. [^]Mtoto a -na -kula [^]mkate.
 child 3SG -PROG-eat bread
 ANIM
 The child is eating bread.

In (93a), the bound pronominal prefix, a- '3SG animate', functions as an anaphoric pronoun, whereas in (93b), it functions as a marker of grammatical agreement.¹⁶

A scenario for the diachronic development of grammatical agreement from anaphoric pronominalization is given by Givon (1984:362):

Pronouns - and unstressed anaphoric pronouns - may be used as "noun substitutes" under conditions of co-reference. When they cliticize, however, the probability increases that they may be interpreted by subsequent generations of speakers as obligatory parts of the verbal word, not only as substitutes for the co-referent but also when the co-referent NP is present. Under such conditions, one may say that the verb "agrees with an NP", and one then observes the phenomenon of grammatical agreement. (emphasis TG)

Now, as when serving an anaphoric function, bound pronominal affixes expressing grammatical agreement can also be classified as patterning either ergatively or accusatively. A standard definition of an ergative pattern of grammatical agreement is given by Moravcsik (1978:258-9):

By the broader definition of ergativity, a verb-agreement system is ergative if there is agreement between the verb and objects and intransitive subject (regardless of whether the markers are the same or not) but not between the verb and transitive subjects. According to the stricter definition, a verb-agreement system is ergative only if there is agreement between the verb and objects and intransitive subject such that the agreement markers are the same and, if there is also agreement between the verb and the transitive subject, the agree-

ment markers indicating the relation between the transitive subject and the verb are not the same as those indicating the relation between objects and intransitive subjects.

It should be noted that this definition reflects the general typological situation across languages where the agreement markers cross-reference only the S and O or the S and O in one way and the A in another, but they do not cross-reference just the A.

Moravcsik (1978:263) has also found that there is a link between ergative agreement systems and perfectivity:

If in a language there are two classes of sentences such that there is ergative-type verb agreement in one but not in the other type and the semantic property whose respective presence and lack characterizes the two classes is perfectivity, then it is in the class of perfective sentences that ergative verb agreement will occur, rather than in the other class.

For example, as Moravcsik (1978:260) notes for French, "the past participial part of the perfective verb in written French agrees in number and gender with the subject of intransitive sentences; but if the sentence is transitive, it agrees with its object, rather than its subject, if the object is preverbal".

In Sm'algyax, grammatical agreement occurs regularly with an A that is a full NP (either lexical or an independent pronoun) when the tense/aspect of the sentence is

something other than nah 'PAST' or, if the tense/aspect is not marked, there are some other pre-verbal particles present.¹⁷ (The tense/aspect system is discussed in detail in Section 2.6.1, where it is shown that nah marks the past tense and perfective aspect, whereas a sentence that is not marked for tense has either a past or present meaning. In the simple declarative sentences where the tense is not marked, it is generally clear from the context whether it is past or present.)

Since grammatical agreement only occurs regularly with the A and the bound pronominal affix marking 3rd person As is the 3rd person subjective dependent pronoun, -t, grammatical agreement, in Sm'algyax, is marked by the preverbal affix -t. This is illustrated in the following examples:

- (94) Yagwa-t dzap-dit Rita waas.
 PRES -3 make-CN blanket
 A PRED
 Rita is making a blanket.

- (95) Yagwa yawxg-as Ami. (E)
 PRES eat -CN
 PRED
 Amy is eating.

These two sentences illustrate that the 3rd person dependent pronoun -t appears on the tense yagwa 'PRES' when the sentence is transitive as in (94), but not when it is intransitive as in (95). That is, agreement is with the A and not the S or O.

(96) Ada-t niidz-tga sts'ool-ga 'niit-ga.
 and-3 see -CN beaver -CN 3SG -DEM
 A PRED PRED
 Then the beaver saw him.
 (Boas 191:358)

(97) "'Nüüyu dm -t in naks -ga ɬgüüɬg -n -t,
 1SG FUT-3 TOP marry-CN daughter-2 -DEM
 A PRED POSS
 "I am the one who will marry your daughter,
 Gawo," daya ɬgu ts'apts'ap.
 say little wren
 Gawo," said the little wren.
 (Boas 1912:198)

In (96), there is no tense/aspect particle, but there is a preverbal element, so the -t occurs. The final example, (97), shows that person agreement marking, in Sm'algyax, treats independent pronouns as full NPs, so the -t occurs. The agreement marker, though, does not vary with the person of the independent pronoun. Instead, the agreement marker just indicates that there is a full NP A in the clause.

If the tense/aspect of the sentence is nah 'PAST' or if the tense/aspect is not marked and there are no preverbal particles, then the -t only occurs when the O outranks the A:

(98) Nah dzab-as Dzon waap das Helen. (E)
 PAST make-CN John house CN
 PRED PREP
 John built a house for Helen.

(99) Waay hanax-ga haas-ga.
 find woman-CN dog-DEM
 PRED
 The woman found the dog.
 (Boas 1911:356)

In (98), the tense is nah 'PAST' and in (99), there is no

preverbal element such as a tense/aspect marker. In both of these cases the A and O are lexical NPs and a -t does not occur. However, in (100) and (71), repeated here as (101), the O outranks the A and the -t appears.

(100) Na -t 'niidz-a'nu ol.
 PAST-3 see -1SG bear
 A O
 The bear saw me.
 (Dunn 1979f:63)

(101) T waay-i'nu haas-it.
 3 find-1SG dog -DEM
 A O
 The dog found me.
 (Boas 1911:385)

(The -a- in -a'nu '1SG' in (100) and the -i- in -i'nu '1SG' and the -i- in -it 'DEM' in (101) are all epenthetic vowels.)

The -t agreement marking can be omitted in sentences with certain tense/aspect markers in casual speech, as the following example illustrates. Here (102b) is an informal version of (102a) (Dunn 1979f:68):

(102)a. 'Nüüyu dm -t in baa-'n boot.
 1SG FUT-3 TOP run-TRANS boat
 A
 I am the one who will run the boat.

 b. 'Nüüyu dm in baa-'n boot.
 1SG FUT TOP run-TRANS boat.
 I am the one who will run the boat.

In the data which I have collected the -t person agreement is consistently found with yagwa 'PRES' but is optional with tense/aspect markers such as la 'PAST', la dm 'about FUT', or dm 'FUT'.

(106a), or with a demonstrative pronoun as in (106b):

(106)a. Niidz-u -t 'nüün.
see -1SG-3/CN 2SG
A O PRED
I see you (SG). (literally: I see it, you.)
(Boas 1911:386)

b. (M) dm dzak-d -an -t gu'i.
2SG FUT die -TRANS-2SG-3/CN DEM
A =kill A O PRED PRON
You (SG) will kill this one.
(Boas 1911:385)

In (106a), the -t could be interpreted as a 3rd person objective dependent pronoun marking agreement with 'nüün '2SG' or as a proper noun predicative connective, in which case there is no object agreement. Unfortunately, this is the only example that Boas gives of this type. In (106b), the -t can also be interpreted as a 3rd person dependent objective pronoun or, if gu'i 'DEM PRON' refers to a person, as a proper noun predicative connective. Note in this example the optional double marking of the A with a subjective pronoun, -m '2SG', and an objective pronoun -an- '2SG' (the -a- is epenthetic). Again, Boas only gives two examples of this type of sentence with gu'i 'this one', and I have not found any other examples. In summary, the marking of the verb with a dependent pronoun to show agreement with the O seems to occur in only a few limited types of sentences.

To return to the discussion of ergativity, the person agreement marking in Sm'algyax is typologically unusual, in that it is the A which is marked rather than the S and O,

but it is still an ergative pattern. This grammatical agreement pattern is also unusual in that it behaves just the opposite of the usual pattern which links ergative marking of the A and perfectivity. Instead, the marking of the A occurs most regularly in non-perfective sentences and only in perfective sentences when the O outranks the A.¹⁸

2.5 Number Agreement

In Sm'algyax, verbs, nouns and adjectives form the plural in the same way. Number agreement is obligatory between verbs and the S or O, and between adjectives and the nouns they modify. The relevant nominal and verbal pluralizing morphology is discussed first, and then examples illustrating verb agreement with the S and O are presented.

The general way to indicate the plural number is by reduplication.¹⁹ Detailed studies of the complexities and the somewhat idiosyncratic nature of the reduplication process have been made by Dunn (1978b, 1979g, 1980b, 1981). The most common type of plural reduplication consists of copying the initial consonant and prefixing it along with a vowel and -k-. The vowel that occurs in the prefix is determined by the initial consonant:

<u>singular</u>	<u>plural</u>	
sayp	siksayp	bone
ɪpuun	ɪakɪpuun	whale
goom	gakgoom	ash(es)

Other types of reduplication include:

(a) copying the initial consonant and prefixing it to the word with a vowel and an -x-:

be'ax	baxbe'ak	to tear up
diilmx	daxdiilmx	to answer

(b) copying the initial consonant and the consonant after the first vowel of the initial syllable and prefixing it to that syllable with a vowel:

duup	dipduup	base of a mountain
basagn	büsbasagn	to divide

(c) copying the initial consonant of the initial syllable and prefixing it to that syllable with a vowel:

holtk	haholtk	to be full
siipk	sipsiipk	to be sick

(d) copying the initial consonant of the stressed syllable and infixing it with a vowel between the vowel and any following consonant of the the word:

hana'ax	hana'nax	woman
kwdii	lakwdiidi	to be hungry

Although reduplication is the main way that plurals are formed, a number of other methods of expressing the plural are also found:

(a) the plural is formed by the prefix ga-:

an'on	ga'an'on	hand
p'axs	gap'axs	pants

(b) the plural is formed by the prefix l- with a vowel that is determined by the initial segment of the word:

aks	la'aks	water, to drink (SG)
(cf. ak'aks)		to drink (PL)
		waters)

waay		paddle, to paddle (SG)
	luwaay	to paddle (PL)
	(cf. huwaay	paddles)

(c) the singular and plural have suppletive forms:

yaa	waalxs	to go, step, walk
t'aa	<u>w</u> an	to sit

(d) the singular and plural have the same form:

aatk	night(s)
ol	bear(s)

Returning to the discussion of ergativity, the following examples illustrate verb number agreement with the S or O, but not with the A:²⁰

- (107)a. ʔa miig-a magooxs.
 about ripe-CN salmonberry
 PRED
 The salmonberries are almost ripe.
- b. ʔa mik-miig-a magooxs di -ɬ maayi.
 about PL -ripe-CN salmonberry and-CN huckle
 PRED berry
 The salmonberries and huckleberries are
 almost ripe.

In (107), the verb, miig- 'ripe', is intransitive and in (107a) it is in the singular as the S, magooxs 'salmonberry' is a single type of berry whereas in (107b) it is in the plural as the S, magooxs diɬ maayi 'salmonberry and huckleberry', lists two types of berries. (Note that with this verb the singular/plural distinction indicates the number of different types of berries rather than whether each type of berry is singular or plural.)

The verbs in (108)-(110) are all transitive and the agreement is consistently with the O, not the A.

(108)a. Ada 1a sm -k'ap-k'apg-isga lp-loop-ga, ada
 and PAST very-PL -hot -CN PL-rock-DEM and
 PRED
 When the stones were red-hot, the
 (Boas 1912:182)

wil -t hayts-tga sm'ooygyit-gat
 then-3 send -CN chief -CN
 A (SG) PRED PRED
 chief sent Gyilksats'aantk to get water.

Gyilksats'aantg-at a -t gwün -aksgi-t-ga.
 -DEM and-3 order-bring-3-DEM
 A water O

b. Ada wil -t ksa-has-hayts-tga sm'ooygyit-ga
 and then-3 out-PL -send -CN chief -CN
 A PRED PRED
 Then the chief sent out [his] women.
 (Boas 1911:358)

hananax-t -ga.
 women -3 -DEM
 POSS

In (108a), the A, sm'ooygyit 'chief', the O, Gyilksa-
ts'aantk, and the verb, hayts 'to send' are all singular.
 In (108b), the A, sm'ooygyit 'chief' is still singular, but
 the O, hananax 'women' is plural and the verb, ksahashayts
 'to send out' is in the plural to agree with the O.

The examples in (109) illustrate number agreement with
 dependent pronoun clitics.

(109)a. Dp ooy-in.
 1PL hit-2SG
 A O
 We hit you (SG).
 (Boas 1911:385)

b. M ay-'ooy-i'nm.
 2SG PL-hit -1PL
 A O
 You (SG) have hit us.
 (Boas 1911:385)

In (109a), the A, dp '1PL', is plural, the O, -in '2SG', is singular and the verb, 'ooy 'to hit', is singular to agree with the O. However, in (109b), the A, m '2SG', is singular, whereas the O, -in'm '1PL', is plural and the verb ay'ooy 'to hit' is plural to agree with the O. (The -i- in the suffix in (109a and b) is an epenthetic vowel.)

- (110)a. "Ada-t maɬ -a di -da k'oy," daya gas
 and-3 tell-CN DEM-CN 1SG say CN
 A PRED PREP PREP
 "Then he told [this to] me," she said to
 (Boas 1912:78)

Noo -t -ga.
 mother-3 -DEM
 POSS
 her mother.

- b. Ada wil -t k'a -gwun -niits-'n -tga
 and then-3 really-cause-see -CAUS-CN
 A =show PRED
 Then the chief showed him the names of the
 (Boas 1912:108)

sm'ooygyit-ga na -hu-waa -sga biyaals
 chief -CN POSS-PL-name-CN stars
 PRED POSS
 stars

-t -aga, asge-t maɬ-maɬ -it gas 'niit-ga.
 -3 -DEM CN -3 PL -tell-3 CN 3SG -DEM
 POSS PREP A O PREP
 and told them to him.

- c. Ada-t maɬ -da na -wayk -at da wil
 and-3 tell-CN POSS-brother-3 when then
 A -PRED POSS
 And [their] brothers said it was
 (Boas 1912:198)

hat'axg-a waal-t gi -sga naks -ga
 bad -CN be -3 DEM-CN spouse-CN
 PRED S PREP POSS
 because he had done badly to their brother's

na -wayk -t -ga.
 POSS-brother-3 -DEM
 POSS
 wife.

In the final set of examples, the verb, maɬ 'to tell', is singular in (110a) where the A, -t '3', and the O, di 'this', are singular and is plural, maɬmaɬ 'to tell', in (102b) where the A, -t '3', is still singular, but the O, -t '3', is plural. (The singular/plural meaning for the A and O in these examples is established from previous discourse references in the legend.) And as (110c) demonstrates, the verb, maɬ 'to tell', is still singular to agree with the O which is a subordinate clause, even though the A, nawaykat 'their brothers', is known to be plural from previous discourse references in the legend. (Wayk 'brother' has the same form in the singular and plural.)

In conclusion, number agreement in Coast Tsimshian is ergative in that it occurs between the verb and the S or O, but not between the verb and the A.

2.6 Tense/Aspect of the Clause

In their study of tense, aspect and mood, Chung and Timberlake (1985:202) define these three terms in the following way:

Tense locates the event in time. Aspect characterizes the internal temporal structure of the event. Mood describes the actuality of the event in terms such as possibility, necessity or desirability.

They then go on to characterize tense by using the parameters of tense locus and event frame (Chung and Timberlake 1985:203):

Tense can be described in terms of a temporal dimension that is directional, with a privileged point or interval of time we will call the tense locus...an event occurs on an interval of time, the event frame. Tense locates the event in time by comparing the position of the frame with respect to the tense locus. The two most important considerations in tense systems are the selection of the tense locus and the nature of the relationship between the tense locus and the event frame.

In Coast Tsimshian, the tense locus within indicative clauses is the speech moment, whereas in subjunctive clauses it is some other point such as the event. In narratives, for example, the tense locus is the event of the narrative and almost all sentences except those expressing direct speech are in the subjunctive. In the sentences expressing direct speech the time of locus is the speech moment of the telling of the narration, even though, logically, direct speech is in relation to the event in the narrative.

In the next section I examine those clauses in Sm'algyax where the tense locus is the speech moment, that is, indicative clauses. Subjunctive clauses are considered in Section 2.7.3, where I examine the use of sentence-chaining in narratives and the relation of clauses to each other in complex syntactic structures.

2.6.1 Tense/Aspect System

In Coast Tsimshian, three temporal distinctions are made: events occurring prior to the speech moment, events overlapping the speech moment, and events subsequent to the speech moment. Following Chung and Timberlake's classification system, there is also a metrical temporal distinction which provides an approximate measure of the interval between the event and the speech moment.

The temporal distinctions, however, are expressed by morphosyntactic categories that in some cases have wider aspectual qualities. Chung and Timberlake (1985:213) have defined aspect as characterizing two distinct types of relationship of a predicate to the time interval over which it occurs: first, whether the situation, state or property described by the predicate remains constant or changes over time, and, second, the different relationships a predicate can have with respect to the event frame. For example, at the lexical level, a verb can be said to have a dynamic aspect if it describes a process that can change over time as opposed to a state, which shows little or no change over time. Another basic concept in aspect is what Chung and Timberlake term as 'closure'. They use this term to mean that an event is limited, completed, or wholly contained within the event frame.

The morphosyntactic categories that are distinguished for tense and aspect in Coast Tsimshian are as follows:

Nah marks the past tense and perfective aspect. That is, when nah occurs the predicate has an inherent limit that is reached by the event of the event frame before the time of the speech moment. Nah can be classified as an aorist or a past completed tense/aspect. I gloss it as 'PAST' in the examples presented here.

The absence of any tense/aspect particle expresses present or past; when this \emptyset marking is referred to, it is glossed as 'NonFUT'. In simple declarative sentences present and past are not necessarily distinguished.

Yagwa expresses the present tense and occurs with verbs which have a dynamic aspect. Yagwa can be classified as a present progressive tense/aspect. In the examples contained here it is glossed as 'PRES'.

Dm is the future tense and has no aspectual meaning associated with it. It can occur in conjunction with the present progressive tense/aspect, yagwa dm, with a meaning of 'going to V'.

La is a metrical tense that can occur either by itself or with nah 'PAST' or dm 'FUT'. When it occurs by itself it can have one of two meanings: first, with an event that continues on into the tense locus of the speech event it can have a meaning of 'just beginning' (e.g. I just began sewing her dress). Second, following Chung and Timberlake's classification system, la can have a meaning with an imperfective aspect where the use of la suggests that the

event can be interpreted as either unfinished or as closed and completed (e.g. I gave some abalone to Martha's mother can not only be interpreted as finished but can also be interpreted as unfinished in that it doesn't rule out that I won't give Martha's mother more abalone.) With this meaning the imperfective is used for the cases in between perfective and progressive, when neither the dynamic character of an event nor its closure with respect to the frame is emphasized. Here, I gloss both meanings of la as 'PAST'.

With nah la, there is a meaning of 'just finished' which can be termed a 'recently completed past' tense/aspect or it can have an 'experienced' aspect as in She is experienced in birthing babies or She used to attend at births in the past. In both cases nah la is glossed as 'PAST just'. With la dm, the meaning is 'about to' or 'going to very soon' and it is glossed here as 'about FUT'.

There is one other particle, al, which can be characterized as a modal. It occurs with nah, la and dm and emphasizes the meaning of the tense/aspect particles especially when they are contrary to what is expected (e.g. She has already done it or I would have done it (but somebody else did it)) and is glossed as 'EMPH'. Al also occurs in complex sentences where it introduces a 'but'-clause. This latter use is discussed in Section 2.7.3.

Examples to illustrate each of the tense/aspect or modal particles follows:

(111)a. Nah dzab -as Dzon waap das Helen. (E)
 PAST build-CN John house CN
 PRED PREP
 John has built a house for Helen.

b. Nah tsüü baask da ganlaak.
 PAST blow wind CN morning
 PREP
 The wind was blowing hard this morning.

In (111a and b), the tense/aspect particle is nah and in each case the event has been completed, as in (111a), or wholly contained within the event frame, as in (111b).

(112)a. T'aa-'nu da awaa ha'lihaʔels.
 sit -1SG CN DEM table.
 S PREP
 I sit at a table.

b. Haaytg-t Simon da na -dzoog-a aks.
 sit -CN CN POSS-edge -CN water
 PRED PRED POSS
 Simon is sitting/was sitting/sat by the edge of the water.

In (112a and b), there is no tense/aspect particle. In the first case, the sentence is in a discussion of what a child does at school and expresses a habitual activity. In the second case, the sentence is part of a story in an elementary reader and the tense/aspect of the sentence is clear within the actual sequence of events in the story.

(113)a. Yagwa lu-hayaks-is dp Betty dis Sarah.
 PRES PL-wash -CN PL and
 PRED +CN
 Betty and Sarah are washing clothes.

b. Yagwa dp babuud-n.
 PRES 1PL wait -2SG
 A O
 We are waiting for you.

- (114) Dm gyik uu -'nu dzigits'iip.
 FUT agian go fishing-1SG tomorrow
 S
 I will go fishing again tomorrow.

The examples in (113a and b) illustrate the use of yagwa, while (114) is an example with dm.

- (115)a. la -t gwin -'oy -da hana'a la'at da
 PAST-3 toward-throw-CN girl ball CN
 A PRED PREP
 The girl threw the ball at/to the boy.
 'yuuta.
 boy

- b. la -t dzab -t 'yuuta waap. (E)
 PAST-3 build-CN man house
 A PRED
 The man is just beginning/just began to build the house.

In (115a) la indicates an imperfective aspect and the sentence does not entail that the boy necessarily caught the ball. In contrast in (115b), la indicates that the event is close to the present and has just been started.

- (116)a. Nah la dzab-as Norman na -homework.
 PAST just do -CN POSS
 PRED
 Norman just finished his homework.

- b. Nah la dzab -a 'yuuta waap. (E)
 PAST just build-CN man house
 PRED
 The man is experienced in building houses.

In (116a and b), la occurs with nah and in (116a), they indicate that the event is recently completed while in (116b), they indicate that the A, 'yuuta 'man' has expertise in the event.

(117) $\text{\text{ɛa}}$ dm $\text{\text{ɬuuntii-s}}$ Matyu. (E)
 about FUT mad -CN Matthew
 PRED
 Matthew is about to get mad.

In (117), $\text{\text{ɛa}}$ occurs with dm and together they indicate that the event will be happening close to the present.

(118)a. Na 'al di dzab -at Alfred waap.
 PAST-EMPH on his build-CN house
 part PRED
 Alfred has already built the house.

b. $\text{\text{ɛa}}$ dm al -t dzap-t.
 about FUT EMPH-3 do -3
 A O
 He was going to do it (but he didn't).

In the final set of examples, (118a and b), the modal particle al occurs. In (118a), it coalesces with nah . Alternate forms are $\text{nah \text{ɛa al}}$ and $\text{nah \text{ɛa'al}}$. According to some Sm'algyax speakers, the emphaticness of the statement is the strongest with the three separate particles and weakest in the most contracted form. I was also told that the sentence in (118b) characterizes a situation such as "when you tell a child to do something, but they don't do it right away, so you start to do it and then they say that they really were going to do it".

2.6.2 Conditioning Factor in Morphological Ergativity

The distribution of the predicative connectives, the dependent pronouns and person agreement are all conditioned by the tense/aspect of the sentence. In this section I examine how the distribution in each case is conditioned by the following tense/aspect particles: nah 'PAST', $\text{nah \text{ɛa}}$ 'PAST just', 0 'NonFUT', dm 'FUT', $\text{\text{ɛa dm}}$ 'about FUT', $\text{\text{ɛa}}$

'PAST' and yagwa 'PRES'. Then, by considering all of the distributions together, a continuum is established which gives a relative ordering of the tense/aspect particles.

With the predicative connectives, there are several different areas which are conditioned by the tense/aspect of the sentence: indicative versus subjunctive; in the reduced system, the division between marking a common noun A with -da or -a and a proper noun A with -as or -dit; and the optionality of connectives in casual speech.

In the first case, the predicative connectives are in the indicative with all of the tense/aspect particles. This is illustrated in the following examples:

- (119) Dm dzak-d -asga gyibaw-ga haas-ga.
 FUT die -TRANS-CN wolf -CN dog -DEM
 =kill PRED PRED
 The wolf will kill the dog.
 (Boas 1911:356)

- (120) Nah stuul -da l̥güül̥g-m 'yuut-ga.
 PAST go in -CN young -CN man -DEM
 company PRED ADJ
 The boy went along.
 (Boas 1911:355)

In (119), the sentence is transitive and the A, gyibaw 'wolf' is marked with the absent indicative ergative connective, -sga on the verb, dzakd- 'to kill', and the O, haas 'dog' is marked with the absent indicative absolutive connective, -ga on the A. (The -a- in -asga is an epenthetic vowel.) The example in (120) is intransitive and the S, l̥güül̥gm 'yuut' 'boy' is marked with the present indicative absolutive connective, -da. The tense/aspect in (119) is

dm 'FUT' while in (120) it is nah 'PAST' and in both cases the connectives are indicative rather than subjunctive.

With the reduced set of predicative connectives and a common noun A, an -a occurs with nah 'PAST', nah la 'PAST just' or \emptyset 'NonFUT' while -da occurs with all of the other tense/aspect particles:

- (121) Yadz-a 'yuuta an'on-t.
 cut -CN man hand -3
 PRED POSS
 The man cut his hand.

- (122) la dm sik-saksl-da noo -yu hoon.
 about FUT PL -clean-CN mother-1SG fish
 PRED POSS
 My mother is going to clean the fish.

In (121), the tense/aspect is unmarked and the A, 'yuuta 'man' is marked with the common noun connective -a, whereas in (122), the tense/aspect is la dm 'about FUT' and the A, nooyu 'my mother' is marked with the common noun connective -da.

When the A is a proper noun, -dit occurs with yagwa 'PRES' and la 'PAST', while -as occurs with all of the other tense/aspect particles:

- (123) Dm dzab-as Andrea na -gaws-u.
 FUT make-CN POSS-hair-1SG
 PRED POSS
 Andrea is going to fix my hair.

- (124) la -t 'limaga-dit Meli txadzamsk da lax
 PAST-3 put -CN Mary boiled CN top
 A PRED fish PREP
 Mary has already put the boiled fish on the
 stuub.
 stove
 stove.

The tense/aspect in (123) is dm 'FUT' and the proper noun A, Andrea, is marked with the connective -as on the verb, dazb- 'to make'. In contrast, in (124), the proper noun A, Meli is marked with the connective -dit as the tense/aspect is la 'PAST'.

In casual speech, the reduced set of predicative connectives must be used with yagwa 'PRES', whereas they are optional with all other tenses. This is illustrated in (29) and (30), which are repeated here as (125) and (126), respectively:

- (125) Yagwa-t k'yilum-da hana'a bilhaa das
 PRES -3 give -CN woman abalone CN
 A PRED PREP
 The woman is giving her mother some abalone.

 noo -t.
 mother-3
 POSS

- (126) Nah k'yilum hana'a bilhaa das noo -t.
 PAST give woman abalone CN mother-3
 PREP POSS
 The woman gave her mother some abalone.

In (125), the common noun connective -da marks the A, hana'a 'woman' on the verb k'yilum 'to give' (the -a connective for the O, bilhaa 'abalone' merges with the final a of hana'a 'woman'). In (126), however, no connective appears on the verb k'yilum 'to give'.

The various divisions of the distribution of the predicative connectives which are conditioned by the tense/aspect of the sentence are summarized in (127):

(127) Predicative Connectives across Tense/Aspect

	<u>nah</u>	<u>nah la</u>	\emptyset	<u>dm</u>	<u>la dm</u>	<u>la</u>	<u>yagwa</u>
full set	←—————indicative—————→						
reduced set	←—————-a————— —————-da—————→						
A=common N	←—————-as————— —————-dit—————→						
A=proper N	←—————optional————— —————required—————→						
casual speech							

With the dependent pronouns the only division is between the indicative and subjunctive, but this division is conditioned by the tense/aspect of the sentence, and, in transitive sentences, also by the semantic content of the A and O relative to each other.²¹ When the sentence is intransitive, the S is in the indicative with nah 'PAST', nah la 'PAST just', \emptyset 'NonFUT', and dm 'FUT' and in the subjunctive with la 'PAST', la dm 'about FUT' and yagwa 'PRES':

(128) Nah baa-'nu.
 PAST run-1SG
 S
 I ran.

(129) la dm baa-yu.
 about FUT run-1SG
 S
 I am going to run soon.

The 1st person singular dependent pronoun is in the definite objective form in (128), which is the form found in indicative clauses, while in (129), it is in the objective form, which is the form found in subjunctive clauses.

In transitive sentences, the A either outranks the O, they are both third person, or the O outranks the A. In the first case, the indicative and the subjunctive configurations are the same when the O is first or second person.

This happens since the A occurs in the subjective and the O in the objective in both configurations. When the O is third person, however, the two configurations are different and the indicative occurs with nah 'PAST', nah la 'PAST just', \emptyset 'NonFUT' or dm 'FUT' and the subjunctive occurs with the remaining tense/aspects. If the O is a lexical NP then the indicative occurs with nah 'PAST', nah la 'PAST just', \emptyset 'NonFUT' and dm 'FUT'; the indicative or the subjunctive occurs with la dm 'about FUT' and la 'PAST'; and the subjunctive occurs with yagwa 'PRES'. When the A and O are both third person, then in the indicative as well as the subjunctive, the A is a subjective pronoun and the O is an objective pronoun.

In the last case, the O outranks the A and the indicative configuration occurs with nah 'PAST', nah la 'PAST just' and \emptyset 'NonFUT'; either the indicative or subjunctive occurs with dm 'FUT' and la 'PAST/begin', and the subjunctive occurs with la dm 'about FUT' and yagwa 'PRES'.

This rather complex distribution can be summarized as in (130):

(130) Dependent Pronouns across Tense/Aspect

	<u>nah</u>	<u>nah la</u>	\emptyset	<u>dm</u>	<u>la</u>	<u>la dm</u>	<u>yagwa</u>
S	←— indicative —→				←— subjunctive —→		
A > O:							
O = 1st/2nd	←— indicative = subjunctive —→						
O = 3rd	←— indicative —→				←— subjunctive —→		
O = NP	←— indicative —→				←— indic/subjn*subjn —→		
A = O	←— indicative = subjunctive —→						
O > A	←— indicative —→				←— indic/subjn subjunctive		

Some examples illustrating the division between indicative and subjunctive configurations across the various tense/aspect particles are:

- (131)a. Nah dzab-u duuḵk.
 PAST make-1SG basket
 A
 I made a basket.
- b. Yagwa-n dzab-a duuḵk.
 PRES -1SG make-CN basket
 A PRED
 I am making a basket.

In (131a and b), the A is 1st person singular and outranks the O, which is an NP. Then when the tense/aspect is nah 'PAST', as in (131a), the A is in the indicative with an objective form, whereas when the tense/aspect is yagwa 'PRES', as in (131b), the A is in the subjunctive with a subjective form.

- (132)a. M waay-i'nu.
 2SG find-1SG
 A O
 You (SG) found me.
 (Boas 1911:385)
- b. Mü -dm k'a -xdi -yu -t.
 2SG-FUT for.a-eat -1SG-DEM
 A while with O
 You shall eat with me.

In (132a and b), the O is 1st person singular and outranks the A, which is 2nd person singular in each case. When the tense/aspect is unmarked, as in (132a), the O is in the indicative with a definite objective form, and when the tense/aspect is dm 'FUT', as in (132b), the O is in the subjunctive with an objective form. In both cases, the A is a subjective form. (In (132b), the -ü- in mü-dm '2SG-FUT' is

epenthetic and the -y- in -yu- '1SG' is inserted because the verb ends in a vowel.)

The final distribution to be considered here is that of the grammatical agreement marker -t. As was shown in Section 2.4, with certain tense/aspect particles the occurrence of the grammatical agreement marker is also conditioned by the semantic content of the A and O relative to each other. Specifically, with nah 'PAST', nah la 'PAST just' and \emptyset 'NonFUT', the -t only occurs if the O outranks the A; with dm 'FUT', la dm 'about FUT' and la 'PAST', the -t is optional in casual speech; and, with yagwa 'PRES' the -t is always required. This can be summarized as in (133):

(133) Person Agreement across Tense/Aspect

	<u>nah</u>	<u>nah la</u>	\emptyset	<u>dm</u>	<u>la dm</u>	<u>la</u>	<u>yagwa</u>
Person Agreement	← occurs if O > A →			← optional in casual speech →		required	

The following examples illustrate the two ends of the continuum in (133):

- (134) Na -t lu'niis-d-it nagwaad-u.
 PAST-3 stare -3-CN father -1SG
 A at O PRED POSS
 My father was staring at them.

- (135) Yagwa-t sigwaan Meli anaay.
 PRES -3 bake Mary bread
 A
 Mary is baking some bread.

The tense/aspect in (134) is nah 'PAST' and is marked with -t to agree with the A, nagwaadu 'my father', since the O is 3rd person and outranks the A which is a lexical NP. In

(135), the tense/aspect is yagwa 'PRES' and is also marked with the -t to agree with the A, Meli.

The distribution of the indicative and subjunctive configurations in the predicative connectives, the dependent pronouns and person agreement across the various tense/aspect particles yields a continuum which gives a relative ordering of these particles:

(136) Continuum of Tense/Aspect Particles

					<u>la</u>	<u>dm</u>	<u>la</u>	
nah	nah	<u>la</u>	∅	<u>dm</u>	{		}	<u>yagwa</u>
					<u>la</u>	<u>la</u>	<u>dm</u>	

With the predicative connectives, the -as/-dit split orders la dm 'about FUT' with dm 'FUT' and la 'PAST' with yagwa 'PRES', whereas with the dependent pronouns, when the O outranks the A, the split between indicative or subjunctive and only the subjunctive orders la 'PAST' with dm 'FUT' and la dm 'about FUT' with yagwa 'PRES'. The arrangement of tense/aspect particles in (136) reflects a continuum from nah 'PAST' and nah la 'PAST just' with a perfective aspect to ∅ 'NonFUT', dm 'FUT', la 'PAST' and la dm 'about FUT' with either no aspectual distinction or an imperfective aspect to yagwa 'PRES' with a dynamic aspect. As noted above, this linear arrangement is derived from the distribution of the various morphological markings that are conditioned by these particles. The significance of the relative ordering of the various tense/aspect particles is addressed in Chapter 4.

2.7 Mood of the Clause

2.7.1 Introduction

Mood is a term which has been used to designate a wide variety of linguistic functions and has been recently discussed from a functional point of view in Bybee (1985) and Chung and Timberlake (1985). Mood, as defined by Bybee (1985:28), "refers to the way the speaker presents the truth of the proposition in the discourse and real-world context". Similarly, Chung and Timberlake (1985:241) define this term as:

Mood characterizes the actuality of an event by comparing the event world(s) to a reference world, termed the actual world. An event can simply be actual (more precisely, the event world is identical to the actual world); an event can be hypothetically possible (the event world is not identical to the actual world); the event may be imposed by the speaker on the addressee: and so on.

Not only do languages differ as to the number of moods which are differentiated morphologically, but as Chung and Timberlake (1985:241) have noted, languages also differ significantly as to which events are evaluated as actual vs. non-actual.

In Coast Tsimshian, there are three moods which are morphologically distinguished: the indicative, the subjunctive, and what I will term the irrealis. In this section, I will examine the types of clauses where each of these moods occurs and then try to discover a coherent conceptual

domain for each.

2.7.2 Irrealis Mood

I treat this mood first since it is quite restricted in its occurrence. As was illustrated in Section 2.2.2.1, the predicative connective which is suffixed to the verb and marks the following NP becomes an -i in interrogative, conditional, and negative sentences. And in Sections 2.3.1 and 2.3.2, it was likewise illustrated that the 1st person singular objective dependent pronoun and the 1st person singular possessive pronoun occurred as -i instead of -u in negatives, sentences expressing potentiality but with reference to the unreality of the event, conditional clauses, imperatives, and, with the possessive pronoun, in vocatives. This distribution can be summarized as in (137):

(137) Distribution of Irrealis Mood

	PRED CN	1SG OBJ PRON	1SG POSS PRON
interrogative	x		
conditional	x	x	x
negative	x	x	x
potential but uncertain		x	x
imperatives		x	x
vocatives			x

As all of the constructions where this mood occurs indicate that an event is non-actual, I have labelled this mood an irrealis mood. Further, since this mood is so restricted, it can be viewed as an overlay on the indicative and subjunctive moods which are distinguished in the rest of the verbal morphology in these types of clauses. That is, in

the group of clauses listed in (137) the respective connectives and 1SG pronouns occur in the irrealis mood and the rest of the morphological markings occur in either the subjunctive or indicative mood.

The distribution in (137) suggests two questions: first, why is the irrealis mood restricted to predicative connectives and the 1st person objective and possessive suffixes, and, second, what is the conceptual domain that characterizes the language-internal relation among this set of sentences? With regard to the first question, the marking of the irrealis mood in the predicative connectives may be linked to the major role that the connectives play in the morphology of Coast Tsimshian. For example, the predicative connectives signal the speech act type in yes-no questions; recall that apart from intonation changes, they are the sole indicators of a question. And although in conditional and negative sentences this is not the case, since each of these types of sentences contains a sentence-initial particle such as dzida 'if' or alga 'not', the predicative connectives still play a fundamental role in defining the grammatical structure in these sentences. With the restriction of the irrealis mood to the 1st person dependent pronoun the possible explanations seem clearer. As noted above, mood signals how the speaker chooses to describe the actuality of an event in a particular discourse. Thus, it is not surprising that the irrealis mood

is marked in the 1st person dependent pronoun which names the source, or speaker, of the proposition and the one choosing to view it as non-actual.

In order to try to determine the conceptual domain that characterizes the types of sentences which occur in Sm'algyax in the irrealis mood, it is helpful to distinguish two types of non-actuality: epistemic and deontic. Following Chung and Timberlake (1985:250), "the epistemic mode evaluates the actuality of an event, while the deontic mode expresses the imposition of actuality." The interrogative, conditional, negative and potential all express a lack of conviction about the actuality of an event, albeit to different degrees. The degree of doubt ranges from uncertainty, which is expressed by the potential, to certainty that it is not so, which is expressed by the negative. Imperatives and vocatives are deontic in that the speaker is imposing an event (for imperatives) or label (for vocatives) on the addressee. Bybee (1985:183) has found a cross-linguistic relation to exist between imperatives and epistemics.²² In her 50-language survey, she found that seven of the twelve languages that have an epistemic mood, have this mood marked in the same way as the imperative. In the remaining five languages, the epistemic marker is found in a different position from those for the imperative and related moods. Perhaps the language internal relation between these constructions in Coast Tsimshian is that in

each case the speaker is asserting the event in the discourse to be non-actual - with epistemics, this is expressed by the speaker giving varying degrees of commitment to the non-actuality of the event, whereas with deontics, this is expressed by the speaker ordering that the non-actuality of the event be changed by the addressee.

To summarize, the irrealis mood in Sm'algyax occurs in various constructions which are presented by the speaker as non-actual. The two morphological markings of the irrealis mood are the change of the predicative connective to -ɬ and the 1st singular dependent pronoun from -u to -i. However, the irrealis mood is not marked by these two different morphological markings in exactly the same contexts. The irrealis mood is marked by the predicative connectives in interrogative, conditional and negative sentences, whereas it is marked by the 1st singular dependent pronoun in conditional, negative, potential but uncertain, and imperative sentences and in vocatives.

2.7.3 Indicative and Subjunctive Moods

Traditionally, the indicative and subjunctive moods are taken to apply to main and subordinate clauses, respectively. For example, Bybee (1985:186) notes that:

Subjunctive is the term usually applied to special finite verb forms associated with certain types of subordinate constructions. The range of uses of the subjunctive varies considerably from language to language. A subordinate clause that uses a subjunctive verb in one language might take an indicative

verb in another language, a nonfinite construction in still another...For the most part, subjunctives are concomitants of particular constructions: that is, they occur in the complements of certain main verbs, or they occur after certain conjunctions.

That is, the indicative mood generally applies to primary events that are expressed by main clauses, whereas the subjunctive mood applies to secondary events which are expressed by subordinate clauses. However, in Coast Tsimshian, the subjunctive mood also occurs in some main clauses as well as in subordinate clauses. Thus, the use of these terms in Coast Tsimshian doesn't obviously "match" the way they are generally used in other languages. I follow Boas and use the terms subjunctive and indicative here and justify my use of them in the following two sections. Specifically, in the next section I examine the types of main clauses where the subjunctive mood occurs in Sm'algyax and in the following section I consider the semantic domain of the indicative and subjunctive moods.

2.7.3.1 Sentence-Initial Conjunctions and Negatives .

The subjunctive mood occurs in two types of clauses in Coast Tsimshian: first, in sentences which begin with a main clause that has a sentence-initial conjunction such as those listed in (138) or a sentence-initial negative particle such as those in (139):

(138) Sentence-Initial Conjunctions

ada	-	and (subsequent)
da	-	then
da'al	-	but
ada wil	-	and then
da wil(a)	-	and then
'yagay	-	instead

(139) Sentence-Initial Negatives

ałga	-	not
ał	-	negative yes-no question
gyila	-	don't

Second, the subjunctive mood occurs in subordinate clauses which begin with a clause-initial particle such as those in (140). These subordinate clauses may be the first or subsequent clause in a complex syntactic construction.

(140) Clause-Initial Particles

dzida	-	when, if
opdza	-	lest
ts'u	-	although
asi	-	while
ami	-	if (event assumed as not likely to happen)
yuł	-	if (event expected to happen)
awil	-	because
a dm	-	in order to, that
a	-	and
wil, wila	-	that

The sentence-initial conjunctions are used in narratives and other discourse to chain sentences together and, thus, are similar to the clause-initial particles which link clauses within complex sentences. (The significance of the presence of the subjunctive within negative sentences is discussed in the next section.) Examples of all three

types of particles are found in the following sentences:

- (141) Ada gyik loogak-sga n -lii-t.
 and again wet -CN POSS-fur-3
 PRED POSS
 And his fur was wet again.
- (142) Ałga n dm k'yinaam-t a -ł hana'ak.
 not 1SG FUT give -3 PREP-CN woman
 A O PREP
 I shall not give it to the woman.
 (Boas 1911:403)
- (143) Dm -t naksg-u, ami-m dzi anox -t.
 FUT-3 marry-1SG if -2SG weakens agree-3
 A O A statement to O
 He will marry me, if you agree to it.

In (141), which begins with the sentence-initial conjunction ada 'and', the S, nliit 'his fur' is marked with the subjunctive predicative connective, -sga, rather than the indicative, -ga. Similarly, in (142), the sentence begins with the negative marker, ałga 'not', and the A is marked with n '1SG', a subjective dependent pronoun, rather than with -u '1SG', an objective dependent pronoun. Thus, (142) is in the subjunctive mood rather than the indicative. In (143), the second clause begins with the clause-initial particle ami 'if' and this clause is also in the subjunctive since the A is marked with -m '2SG', a subjective dependent pronoun rather than with -n '2SG', an objective dependent pronoun.

To summarize, the Sm'algyax subjunctive mood occurs in main clauses which begin with a sentence-initial conjunction or a negative particle, as well as in subordinate clauses. The sentence-initial conjunctions occur frequently in

narratives and in other discourse and serve to sequentially chain sentences together.

2.7.3.2 Conditioning Factor in Ergativity

The dependent pronouns and the full set of predicative connectives both distinguish the indicative and subjunctive moods. In Section 2.6.2, it was shown that the distribution of these two moods in the dependent pronouns is conditioned by the tense/aspect of the sentence. This was schematized as in (130), which is repeated below as (144):

(144) Dependent Pronouns across Tense/Aspect

	<u>nah</u>	<u>nah la</u>	<u>∅</u>	<u>dm</u>	<u>la</u>	<u>la dm</u>	<u>yagwa</u>
S	←—indicative—→				←—subjunctive—→		
A > O:							
O = 1st/2nd	←—indicative = subjunctive—→						
O = 3rd	←—indicative—→				←—subjunctive—→		
O = NP	←—indicative—→				←—indic/subjn—→		subjn
A = O	←—indicative = subjunctive—→						
O > A	←—indicative—→				indic/subjn		←—subjunctive—→

In contrast, as was also shown in Section 2.6.2, the full set of predicative connectives occurs in the indicative mood with all the various tense/aspect markers.

In addition, as was shown in the previous section, both the full set of predicative connectives and the dependent pronouns occur in the subjunctive mood in main clauses with sentence-initial conjunctions or negative markers, as well as in subordinate clauses. This distribution can be represented as in (145):

(145) Interaction of Tense/Aspect and Mood

	<u>Main Cl</u>					<u>Subord Cl</u>
	<u>nah</u>	<u>nah</u>	<u>la</u>	<u>Ø</u>	<u>dm la dm la yagwa</u>	<u>S-Initial</u>
						<u>Conj/Neg</u>
Pred. Cns. (full)	←—indicative—→					←—subjunctive—→
Dep. Prons	←—indicative—→					←—subjunctive—→

In the literature on ergativity (e.g. Dixon 1979:97), Coast Tsimshian has been cited as an example of a split in ergativity between main and subordinate clauses. As such it could be said to be a grammatically conditioned split, rather than a semantically motivated split such as a tense/aspect type split. However, as is summarized in (145), the split in ergativity marked by the indicative and subjunctive moods does not exactly line up with the grammatical division between main and subordinate clauses. Instead, the distribution of these two moods can be shown to have a coherent semantic basis.

First, as was discussed in Section 2.6, Chung and Timberlake (1985:203) have defined the tense locus as the point of interval of time against which the tense locates the event of the sentence. In most languages, the tense locus is taken as the moment of speech in main clauses which express primary events. However, the tense locus in main clauses can also be defined by the event of the discourse rather than by the speech moment. In subordinate clauses, as Chung and Timberlake (1985:209-10) discuss, one of the options is that the subordinate (or secondary) event

will be characterized temporally only with reference to the primary event expressed in the main clause. Now, it would seem that Coast Tsimshian main clauses in which the tense locus is taken as the moment of speech are marked in the indicative mood, while main clauses which begin with a conjunction and subordinate clauses have a tense locus which is defined by a former sentence or by the primary event in the main clause, respectively. That is, Coast Tsimshian has a technique of sentence-chaining which requires the tense locus of the chained sentences to be that of the discourse rather than that of the speech moment.

Next, the occurrence of the subjunctive mood in main clauses that begin with a negative particle can be shown to be linked to the occurrence of the subjunctive mood in the dependent pronouns across the various tense/aspect markers. As noted with regard to the irrealis mood, negatives express a certainty that the event is not so, or, in other words, that it is not actual and, therefore, is not completed. Similarly, as is summarized in (145), the tense/aspect markers which can occur with the subjunctive mood in the dependent pronouns all express a degree of non-completeness as opposed to the tense/aspect markers which occur only with the indicative mood. This later set of tense/aspect markers includes nah 'PAST' and nah la 'PAST just', which both have a perfective aspect, and \emptyset , which expresses simply past or present. With the perfective aspect the event

is viewed as complete, while with a \emptyset marker, no commitment to completeness or incompleteness is being made. In contrast, the tense/aspect markers which can occur with the subjunctive mood in the dependent pronouns all refer to an event that has not yet happened or is not emphasized as complete: dm 'FUT' and la dm 'about FUT' refer to an event which is in the future or near future and is, thus, not complete; la 'PAST' occurs when neither the dynamic character of an event or its completeness is emphasized; and yagwa 'PRES' has a dynamic aspect and is, therefore, strongly non-complete.

While the language-internal relation between the occurrence of the subjunctive in negatives and with the dependent pronouns with various tense/aspect markers appears to be the semantic domain of non-completeness, the question remains as to what the relation is between the occurrence of the subjunctive in these types of main clauses and the expected occurrence of this mood in subordinate clauses. A relevant observation is that of Bybee (1985:186):

Since the subjunctive is usually a marker of certain types of subordination, it is very difficult to say what the subjunctive "means" in any given language. There is a long literature on this problem in European languages, and no satisfactory solution. At most, it might be said that the subjunctive has a very general meaning such as "non-asserted" and then it takes more specific meanings from the context in which it occurs.

In Sm'algyax, the broad notion of "non-asserted" does seem

to provide an appropriate semantic characterization of the use of the subjunctive mood in main clauses and subordinate clauses. That is, in all subordinate clauses as well as in main clauses where the the subjunctive mood occurs in chained sentences and in clauses with the semantic domain of non-completeness, the broad semantic characterization of "non-asserted" seems appropriate.

To summarize, the subjunctive mood, in Coast Tsimshian, occurs in main clauses in two types of situations: clauses in which the tense locus is defined by the discourse rather than by the speech moment and in clauses where the the tense/aspect marker expresses a degree of non-completeness. The indicative mood occurs in the remaining types of main clauses: clauses in which the tense locus is the speech moment or clauses in which the event is either complete or no commitment to completeness-non-completeness is being asserted. The indicative and subjunctive moods are morphologically distinguished in the full set of predicative connectives and in the dependent pronouns. However, these two moods are not marked by the predicative connectives and the dependent pronouns in exactly the same contexts. In main clauses, the subjunctive mood only occurs in the predicative connectives with sentence-initial conjunctions and negatives, while it occurs in the dependent pronouns with various tense/aspect markers as well.

2.8 Verbal Morphology

In the preceding sections, we have been discussing the following question: given the verb, the nominal arguments, and the tense/aspect and mood of the sentence, are the morphological processes which determine the shape of these constituents - i.e. the connectives with full NPs, the pronominal system and the agreement markers on the verb - ergative or accusative? In the present section we will consider whether the processes which provide for the verb in the first place - i.e. the processes that determine the internal semantic and morphological structure of the verb - are ergative or accusative.

For example, Moravcsik (1978:271) has proposed that:

If there are two verb-lexicalization rules in a language such that the meaning descriptions differ only with respect to the number of some noun phrase referent, this noun phrase referent will be either an object or an intransitive subject, but never a transitive subject.

In Sm'algyax, as we saw in Section 2.5, singular and plural forms of a verb that are suppletive always refer to the number of the S if the verb is intransitive or to the O if the verb is transitive.

There are two basic types of word-formation processes that are relevant to Coast Tsimshian verb-formation: derivation and noun incorporation. In the case of derivation, preverbal particles or suffixes are added to verb stems, whereas with noun incorporation, a noun is compounded with

the verb stem. In the following sections, each of these processes is considered from the point of view of whether they are ergative or accusative.

2.8.1 Preverbal Particles

In some languages, as Moravcsik (1978:262-3) has found, a 'verbal particle' associated with the verb provides for an ergatively patterned marking of total versus partial affectedness of objects and intransitive subjects. In English, the verbal particle is a postposed free form, as in (146b), whereas in Hungarian it is a preposed bound form, as in (147b) (Moravcsik 1978:262-3):

(146)a. We ate the bread.

b. We ate up the bread.

(147)a. Ettük a kenyeret.
ate the bread.ACC
We are eating the bread.

b. Megettük a kenyeret.
up.ate the bread.ACC
We ate up all the bread.

In (146b) and (147b) the verbal particle emphasizes that all the bread has been eaten. As Moravcsik (1978:263) concludes:

Verbal particles, however, never express complete affectedness of transitive subjects; thus, We ate up the bread or Megettük a kenyeret does not mean that, as a result of the action, we were filled with bread.

These facts can be accounted for in the following generalization of the ergative nature of marking 'affectedness'

(Moravcsik 1978:263):

If there is agreement between the verb and some of its noun phrase complements with respect to 'affectedness' or quality, the noun phrase complements participating in this kind of agreement will be objects and intransitive subjects.

Similarly, with respect to locatives expressing position and movement, Keenan (1984:11) has found that:

[S and O] arguments are always among those whose path of movement is specified by goal and source locatives with verbs of motion. [A] arguments are only so specified if the [O] argument is also so specified.

For example, the goal locative into the kitchen specifies the endpoint of the motion of the S in (148a), of the O (and not of the A) in (148b), and of the A and O in (148c) where "the [A] must accompany, at a greater or lesser distance, the O whose path is directly specified by the goal locative" (Keenan 1984:12):

- (148)a. John went/ran/crawled into the kitchen.
- b. Bill pushed/pulled/yanked John into the kitchen.
- c. John followed/pursued/chased Mary into the kitchen.

Keenan adds that he can find no transitive verbs of motion where the goal locative specifies a movement path solely for the A.

To summarize, in each of the cases presented above, there is an ergative patterning in that the S and O behave similarly, but the A behaves differently.

(151) Dzaga -yaa awta da lax daaw.
 across-walk porcupine CN top ice
 PREP
 Porcupine walked across on the ice.

(152) N -dm man -gad -n.
 1S-FUT up through-take-2S
 A air O
 I will take you up.

(151) and (152) are examples with locative movement particles in which the particle indicates where the movement of the verb is taking place: in (151), dzaga 'across' tells where the S is walking and in (152), man 'up thorough the air' tells where the O is being taken. Again, in (152) it is the location of the O which is affected, not the A.

(153) Dawila k'aba hagwil yaa -t-ga.
 then little slow walk-3-DEM
 one S
 Then the little one walked along slowly.

(154) Ada-t sa -gal'oot-ga awta -ga
 and-3 suddenly-let go -CN porcupine-CN
 A of PRED PRED
 And porcupine suddenly let go of the top of the
 n -ts'waan-sga gan -ga.
 POSS-top -CN tree-DEM
 POSS
 tree.

In (153) and (154), the particles hagwil 'slowly' and sa 'suddenly' indicate the manner in which the action of the verb is carried out by the S and A, respectively. Here the particle refers to the S and A rather than the S and O.

(155) Ada k'a -t'aa-t.
 and for a-sit -3
 while S
 And he sat for a while.

- (156) Mü-dm k'a -xdi -yu-t.
 2S-FUT for a-eat -1S-DEM
 A while with O
 You shall eat with me for a while.

A time particle, k'a 'for a while', is given in (155) with an intransitive verb and, in (156), with a transitive verb. In the first case, the particle indicates how long the S sat while in the second it indicates how long the O will be eating with the A. In these examples it is the duration of the action of the verb on the S or O which is given, not of the A.

- (157) Ada wil k'ap 'wiihawtg-it.
 and then really cry -3
 S
 And then he cried and cried.

- (158) Ada-t gyik 'lagawk kwłaxs-t a ts'm 'nlak.
 and-3 again from side kick -3 PREP in fire
 A of house O place
 to fire
 And he kicked him again into the fire.

Examples of particles expressing degree are given in (157) and (158). In (157), k'ap 'really' tells how hard the S is crying and, in (158), gyik 'again, also' tells how many times the O is being kicked into the fire. With these examples it is the S and O which are affected, not the A.

As these pairs of examples with intransitive and transitive verbs indicate, the vast majority of the preverbal particles affect the S or O, but not the A. That is, the proclitics generally pattern ergatively.

However, two particles which clearly do not pattern ergatively are banm 'to act as though one was performing an

suffixes are the focus of this section and will be discussed in detail below.

First, the lexical suffixes are all derivational suffixes that can be related phonetically and semantically to independent lexical items (Dunn 1979f:37):

<u>gan</u>		tree, wood, stick
	bats <u>gn</u>	to arrive in a boat
		(batsk - <u>gan</u>)
		arrive-tree
	k'yiwal <u>gn</u>	ship worms
		(k'yi-wal - <u>gan</u>)
		down-yellow-tree
		cedar

The modal suffixes, which follow the pronominal suffixes, express certainty (-sn), uncertainty (-gyin/-gun) and a reported course of information (-gat) (Boas 1911:348-9):

(161) Ni'nii-t-sn.
that -3-certain
be S
Indeed, it is he!

(162) Nahawn-gun -a 'nax'nuu-yu.
be -might-CN hear -1SG
true PRED
It may be that it is true what I have heard.

The grammatical or non-basal suffixes (to use Dunn's (1983) terminology for these suffixes which are not phonologically relatable to lexical bases) display an exceedingly complex relationship between sound and meaning. This relationship was characterized by Boas (1911:343) as being extremely irregular and ill-defined. Nevertheless a careful morpho-semantic analysis by Dunn (1983) has shown that there are consistent and regular associations between the

suffixes and very abstract derivational features such as argument reduction and argument augmentation.

Because of the non-productiveness and idiosyncratic nature of the derivations associated with Coast Tsimshian non-basal suffixes, Dunn assumes that the lexicon has associated with it a number of semantic rules (SRs) which relate simple stems to complex stems, that the SRs operate independently of morphological rules (MRs) which attach a particular suffix to a stem, and that the separate lexical entries specify the SR and MR used. The model which he adopts is the lexicalist theory developed by Jackendoff (1975), as it provides a framework which appears to capture the essence of the Coast Tsimshian data. The focus of interest here is not the model per se, but whether the processes relating simple stems to complex stems are ergative or accusative.

What makes the Sm'algyax data so complex is that in very few cases does a particular suffix indicate a particular derivation exclusively and consistently (e.g. the suffix -s is not in a one-to-one relationship with a process making one-place predicates into two-place predicates). However, Dunn does find that the suffixes correlate with general types of rules. For example, the suffixes -sk, -k, -x, -tk, and -s are almost always used with SRs which reduce the number of arguments, while the suffixes -n and -l are almost always used with SRs which increase the number

of arguments. He also finds that -sk is generally suffixed to verb stems (which become either verbs or nouns), -k to either noun or verb stems to derive a verb, -s to either noun or verb stems to derive a noun, -x to verbs or nouns to derive other verbs or nouns, respectively, and -tk, -n and -l to verbs to derive other verb stems. These results are summarized in (163):

(163) Relation of Suffixes to Derivational Processes

	<u>-sk</u>	<u>-k</u>	<u>-x</u>	<u>-tk</u>	<u>-s</u>	<u>-n</u>	<u>-l</u>
number of arguments:							
reduces	X	X	X	X	X		
increases						X	X
N	X				X		
V ->{							
V	X	X	X	X		X	X
N			X		X		
N ->{							
V		X					

In the remainder of this section, I discuss each of the thirteen SRs that Dunn gives in terms of whether the process is ergative or accusative. As Dixon (1979:68) notes, "It is certainly the case that EVERY language mingles 'ergativity' and 'accusativity' in the structure of its lexicon" (emphasis RMWD). It is shown below that this is definitely true in Coast Tsimshian.

In the following discussion, I conclude that an SR (or a similar series of SRs) respects ergativity if one of the following holds:

- the derived verbs semantically incorporate Ss and Os

into the verb,

- the Ss and Os of the derived intransitive and transitive verbs have the semantic properties of the nouns from which they are derived,
- a derived noun has the properties of the S or O depending on whether it is derived from an intransitive or a transitive verb, respectively,
- the O of a derived transitive verb has the semantic properties of the S of the intransitive verb from which it is derived.

Similarly, an SR will be said to operate on an accusative basis if, for example, a derived noun has the properties of the S or A depending on whether it is derived from an intransitive or a transitive verb, respectively.

The first three SRs all involve the semantic incorporation of the S or O into the verb. Syntactically, the number of arguments on the verb is reduced or the vacant S or O position is filled by a locative or a genitive and, in each case, a suffix is added to the verb stem by the appropriate MR. In SR 1, with a transitive verb, the semantic structure of some customary O is incorporated into the meaning of the verb and the A becomes the S of the resulting intransitive verb:²⁴

gab		eat
	ga'psk	eat berries off the
		tree
beex		tear
	beexk	tear bark from a cedar
		tree

In SR 2, a locative becomes the O and the derived verb is still transitive:

t'uus		push
	t'usk	sweep

In SR 3, with intransitive verbs a genitive becomes the S of the derived verb:

ts'ii		come in
	ts'iik	be leaking, i.e. have
		water coming in
a'adzik		be sraight
	aadziks	be arrogant, i.e. have
		a straight back

While the number of arguments on the verb is reduced by SR 1 and a different noun fills the 'slot' left vacant by the semantically incorporated O or S in SR 2 and SR 3, it is nevertheless an O or S which becomes part of the verb, not an A.²⁵ For this reason, SRs 1-3 can be said to respect ergativity.

SR 4 relates a simple noun to a complex noun that is related to some quality of the simple noun:

iim		quills
	iimx	facial hair, i.e. a
		body part that is
		like quills

Since this SR only operates between nouns it is not relevant to the discussion of ergativity.

In SR 5 and SR 7, some particular semantic feature of a noun is singled out as a predicate. SR 5 relates nouns to adjectives or intransitive stative verbs. With the verbs, the S is affected by or has the particular semantic

feature of the noun that has been singled out for the predicate:

<u>g</u> aws		hair
	<u>g</u> awsk	be thin, narrow
was		blanket
	wask	be dressed
moolks		crabapple
	moolksx	be sour

SR 7 relates nouns to transitive verbs with a meaning of 'do what the noun does'. Here it is the O which is affected by or comes to have the particular semantic feature of the noun that has been singled out for the predicate:

t'a'k		waterspout
	t'a'kyl	twist
daxs		flounder (fish)
	daxsn	throw flat on the water

In SR 5 and SR 7, the S or O of the derived intransitive or transitive verb has the same semantic properties as the noun from which the verb is derived. Thus, these two SRs respect ergativity.

In contrast to SR 5 and SR 7 which derive verbs from nouns, both SR 6 and SR 9 derive nouns from verb stems. SR 6 handles one derivational pair in the Tsimshian lexicon which is the reverse of SR 5:

xts'ii		be thick
	xts'iik	ribbon worm

Here the verb is the simple form and the noun is derived from it. As expected, the derived noun has the semantic characteristic of the S of the intransitive verb from which it is derived.

SR 9 derives a noun from a transitive verb:

siipn		love
	siipnsk	friend
sgüü		put down, lay down
	sgüüxs	language of the Southern Tsimshian, i.e., laid down because it is no longer spoken.

In each case, the derived noun has the semantic meaning of 'someone/something that has been V+ed'. That is, it is the O of the transitive verb. With regard to ergativity, then, we see that SR 6 and SR 9 respect ergativity in that the derived noun has the properties of the S or O depending on whether it is derived from an intransitive or a transitive verb.

SR 10 is a causative derivation, changing an intransitive verb into a 'cause to' transitive verb:

haytk		stand, stand up
	haytksn	place upright
saypk		be hard (from <u>sayp</u> 'bone')
	saypn	harden

With this SR, the S of the intransitive verb becomes the O of the transitive verb and thus respects ergativity.

In SR 11, a noun is derived from a verb which shares the semantic properties of either the S of an intransitive verb or the A of a transitive verb:

łoo		drift
	łootk	clouds
suwiliin		chase
	suwiliinsk	hunter

As the derived noun is related to the S or A of the verb,

SR 11 clearly operates on an accusative basis rather than an ergative basis.

The final two SRs, SR 12 and SR 13, are not relevant to the discussion of ergativity: SR 12 derives nouns which have an instrumental relationship to the verbs from which they are derived:

gyiimkɬ		wipe
	gyiims	shredded cedar bark
		(used as a diaper to
		wipe babies)

And SR 13 derives a verb (from either a transitive or intransitive verb) that requires a benefactive:

k'aalk		steal
	k'a'almx	steal for

To summarize Dunn's analysis of Coast Tsimshian suffixes with respect to ergativity as presented here, we see that nine of the SRs (SRs 1-3 and 5-10) respect ergativity as defined earlier in this section, one of the SRs (SR 11) operates on an accusative basis, and three of the SRs (SRs 4, 12 and 13) are not relevant to ergativity.

2.8.3 Noun Incorporation

Noun incorporation is a process that universally tends to be ergative in that verbs incorporate objects - if the verb is transitive - or intransitive subjects - if the verb is intransitive - but do not incorporate their transitive subjects (Moravcsik 1978:267). In a recent cross-linguistic study of noun incorporation, Mithun (1984) has determined that there are four types of noun incorporation and

that the range of nouns which can be incorporated is independent of whether the language is basically of the ergative, accusative, or agent/patient type. The hierarchy for incorporation which she has found to occur is: O < S < Instrument and/or Locative (1984:875).

In Coast Tsimshian, only the O can be incorporated into the verb²⁶ and, with the exception of the lexicalized items discussed in Section 2.8.2, only Mithun's Type I incorporation occurs where the incorporation reduces the number of arguments on the verb. In this case a transitive verb becomes intransitive when the O is incorporated. Noun incorporation, in Sm'algyax, occurs when a habitual activity toward an object is expressed as in (164) and (165):

(164) aad -m masoo
 seine-CN sockeye
 to seine for sockeye

(165) saksig-m hoon
 clean -CN fish
 to clean fish

In these two examples, the connective -m occurs, which is the same connective that is used in adjective + noun constructions, as in (166), and in compound noun constructions, as in (167):

(166) gałgwisgüüd-m sisuus-m hana'nax
 happy -CN little-CN girls
 ADJ ADJ
 the happy little girls

(167) daxł -m -luut
 hammer-CN -wedge
 ADJ
 sledge hammer with wedge

When the O is incorporated into the verb the A NP appears with the predicative connective that marks an S, and the third person dependent pronoun marking an A does not occur on the tense/aspect of the sentence:

- (168) Yagwa suwiliinsg-m wan -s Nagwaat.
 PRES hunt -CN deer-CN father
 PRED
 Father is out deer hunting.

- (169) Yagwa lee -m lak -s Nagwaat.
 PRES haul-CN firewood-CN father
 PRED
 Father is hauling firewood.
 (Dunn 1979f:61)

In (168) and (169), nagwaat 'father' is marked with the proper noun predicative connective -as that marks a proper noun S and yagwa 'present tense' is not marked with the -t, the third person dependent pronoun. However, the predicative connective -as can also occur marking the A, so by itself this is not a complete test that the sentence is intransitive. With a pronoun, though, we see that the definite objective dependent pronoun form, which only marks Ss and Os, occurs:²⁷

- (170) Gyeł -xbiis-'nu.
 carve-box -1SG
 S
 I am a bentwood box carver.
 (Boas 1911:365)

There are also several intransitive verbal constructions which are formed with a particle and a noun: sa- 'to make', as in (171), x- 'to eat, experience, sense', as in (172), and xs- 'to resemble', as in (173):

- (171) sa -na'ax
make-dress
to make a dress
- (172) x -la'ask
eat-seaweed
to eat seaweed
- (173) 'wii-xs -nooɬ
very-like-drum
it sounds loud like a drum
(Boas 1911:336)

As with the incorporated nouns in (164), (165) and (168)-(170), each of the nouns in the particle + noun constructions corresponds to the O and the construction is intransitive. This is illustrated in the following examples where the NP is marked with the predicative connectives marking S, although this is not conclusive by itself, and the tense/aspect is not marked with the third person dependent pronoun:

- (174) Yagwa sa -la'asg -as Noo -yu.
PRES make-seaweed-CN mother-1SG
 PRED POSS
My mother is picking seaweed.

With a pronoun, the definite objective dependent pronoun occurs:

- (175) Sa -yeɬ -waay -'nu.
make-smooth-paddle-1SG
 S
I am a paddle-polisher.
(Boas 1911:365)

In summary, the incorporated structures and the particle + noun constructions all appear as intransitive verbs with the noun in the verbal complex corresponding to the O and the A marked as an S. Thus, Sm'algyax only allows the

most accessible argument, O, to be incorporated and, as such it is not a verb-formation process which shows an ergative (or an accusative) pattern.

2.9 Summary

In this chapter I have explored the correlates of ergativity at the morphological level in Coast Tsimshian at two levels: first, I considered whether the morphological markings which indicate the function of an NP in a sentence are ergative by examining the connective system, the pronominal system, and person and number agreement on the verb. Then, I considered whether the processes which determine the internal semantic and morphological structure of the verb are ergative by examining the processes of verb formation at the lexical level.

Looking first at the morphological markings which indicate the function of an NP in a sentence, I showed that there are three factors which condition the distribution of these markings: the person or semantic nature of the A and O relative to each other, the tense/aspect of the clause, and the mood of the clause. With the first factor, only the dependent pronouns and person agreement are affected as opposed to the second and third factors where the distribution of all of the types of morphological marking are affected except that of number agreement.

There are three types of connectives which were considered here: predicative connectives, possessive connectives, and prepositional connectives. Within the full system of each of these types it was shown that distinctions are made as to whether the head of the following noun phrase is a common or proper noun, whether it occurs in an indicative or a subjunctive clause, and whether its location relative to the speech act is indefinite, present or absent. In the reduced system of each of these types, it was shown that only a common noun/proper noun distinction is made and the reduced system is related to the indefinite forms of the full system. Further, the possessive and prepositional connectives were found to be related to the absolute predicative connectives.

With regard to ergativity in the predicative connectives, it was concluded that ergativity occurs in the full set of connectives in all but the indefinite forms or the subjunctive forms when the O NP is not immediately following the verb. In these non-ergative cases, however, the forms are not accusative. They either make no distinction, mark the S differently from the A and O, or mark all three NPs differently. In the reduced set of connectives, ergativity occurs in the common noun forms when the A is marked with -da. An accusative system occurs in the proper noun forms when the A is marked with -as. In the other two cases, when a common noun A is marked with -a and a proper

noun A with -dit, the forms are neither ergative or accusative: they either make no distinction or mark all three NPs differently.

In the pronominal system, three types of pronouns were examined: dependent pronouns which are affixes on the verb, possessive pronouns which occur as suffixes on the possessed noun, and independent pronouns which function as lexical NPs. Morphologically, all three types differentiate three persons with a singular/plural distinction in the 1st and 2nd person. The independent pronouns also make a singular/plural distinction in the third person. There are three different sets of dependent pronouns which occur: subjective, objective and definite objective. The possessive pronouns are identical to the objective series of dependent pronouns while the independent pronouns are composed of a root and the objective series. Syntactically, the choice of dependent pronoun, like that of a connective, depends on whether the clause is indicative or subjunctive and, as noted above, is conditioned by the tense/aspect of the clause and the semantic nature of the A and O relative to each other.

In terms of ergativity, it was concluded that ergativity occurs in the dependent pronouns in all but the indicative when the A is 1st person and the O is 1st person or 2nd person plural and when the A is a 1st or 2nd person and the O is a third person. In these non-ergative cases, how-

ever, the forms are not accusative. They either mark all three arguments differently or the S is marked differently from the A and O. With the possessive pronouns, there is a connection between these pronouns and those marking the A, but the same dependent pronouns also mark the S and O in the subjunctive and the O as well as the A in some instances in the indicative. With the independent pronouns, it is shown that they have the same form irrespective of whether they function as an A, S or O within a clause. Because no distinctions are made, they are neither ergative or accusative.

The last type of morphological marking which cross-references the S, A or O on the verb is person and number agreement. In Coast Tsimshian, person agreement occurs when the A is an independent pronoun or a lexical NP. It is an ergative pattern as only the A is marked rather than the A and S or just the O. Number agreement is also ergative in that the verb agrees in number with the S and O, but not the A.

Turning to ergativity at the lexical level, there are two basic types of verb-formation processes that were examined: derivation and noun incorporation. In the case of derivation, preverbal particles or suffixes are added to the stem, whereas, with noun incorporation, a noun is compounded with the verb stem. For the particles, it was shown that with the overwhelming majority of them, it is

the S and O, but not the A which participate in the agreement marked between the verb and some of its noun phrase complements with respect to 'affectedness', 'existence state', or when a path of movement is specified with a verb of motion. That is, the majority of particles pattern ergatively, not accusatively.

With the suffixes, it was shown that the processes which relate simple stems to the stems with grammatical suffixes are generally ergative. Using Dunn's (1983) analysis with 13 rules, it was argued that 9 respect ergativity, 1 operates on an accusative basis and 3 are not relevant to ergativity. Finally, with noun incorporation, it was shown that only Os can incorporate and, as a result, this verb-formation process is neither ergative or accusative.

Notes

1. Susman (1940c) uses the terms unexpected/expected/former. However, I will use Boas' terms here as I find they more accurately reflect the categories as I have found them to be used in Sm'algyax.
2. An (E) indicates that the example has been directly elicited from a native speaker, rather than being from a text or observed in natural discourse.
3. In the discussion of predicative connectives given by Dunn (1979b), he presents the system used in contemporary speech in Coast Tsimshian and Southern Tsimshian. The Coast Tsimshian connectives are divided into two sets: those that are considered "acceptable" and have been elicited as such and those that Dunn has actually observed in use. He examines the connectives in sentences with either the past tense nah or the present tense yagwa and all of the examples given are with the set of "observed" connectives. This set of "observed" connectives is the same as my "reduced" list given in (21), with the exception of the proper noun connectives marking As, which are discussed below.

The "elicited" set, however, shows several differences. For the proper noun connectives marking S, Dunn elicited -at with the past tense and -as with the present tense. In the observed set, though, he found only -as independent of whether the sentence was in the past or present tense. With a common noun A, he elicited -a with the past tense and -da with the present tense. However, in observed sentences he found that both connectives occurred with the past tense. With a proper noun A, he elicited -dit with the past tense and -dis with the present. In observed speech, though, he found only -dit with the present tense. (He did not observe any examples with the past tense.) He does not make any mention of the proper noun connective -as marking As which I have found used regularly.

It is not clear why there is the variation between the "elicited" set and the "observed" set in Dunn's data. However, variation between my "reduced" set and Dunn's "observed" and "elicited" sets may be due to dialect differences; his data were collected in Metlakatala, Alaska, whereas mine were collected in British Columbia. While the Coast Tsimshian settled Metlakatla, Alaska, only about 100 years ago, there are some noticeable differences in the dialects (e.g., lexical differences and lack of [ʷ]) and the language loss has been much more pervasive in the Alaska group

than in the British Columbia groups.

4. This is the same conclusion which Dunn (1979b:136-7) reaches for his set of elicited predicative connectives.
5. This includes nouns designating parts of the body, locations referring to the possessor (e.g. txalaan 'the place behind'), and some kinship terms (e.g. noo 'mother'). In the last case, these kinship terms, as Dunn (1979f:57) notes, must be considered, in some way, to express kinship relations which are inseparable from the possessor (e.g. noo 'mother' is inseparably related, but yaa 'grandfather' is not).
6. Tarpent (1986) has argued that in the Nishga possessive construction morphological distinctions are made between single and distributed possessors and between singular and collective possessions, and that a syntactic distinction is made between the attitude of the possessor from that of the observer. While there are traces of some of the same morphological markers in Coast Tsimshian that have been incorporated into the stems of some lexical items, they do not appear to be productive as they are in Nishga. An analogous syntactic distinction is not found.
7. Boas (1911:360) places the indefinite subjunctive common noun form, -a, in parentheses since as he says, he was unable to find an example covering this category. However, I have found examples of this connective in texts in the fully inflected style.
8. Because the form of the general preposition is a, it is not possible to tell whether the a here is the preposition occurring alone or whether it is actually also carrying an indefinite connective meaning (i.e. it is not possible to distinguish between a + \emptyset or a + a > a). As shown below, the preposition generally occurs in this form when it is followed by a "lexical" preposition as in (i) or when the locative relation is expressed by a prefix on the verb as in (ii):

- (i) Ada-t gyik 'lagawk kwłaxs-t a ts'm 'nlak.
 and-3 again side of kick -3 PREP in fireplace
 A house O
 to fire
 And he kicked him into the fireplace again.

(ii) Ad -it hał -sgüü-t a n -dzoog-a lak.
 and-3 along-put -3 PREP POSS-edge -CN fire
 A down O POSS
 And he put him by the side of the fire.

9. Boas generally writes the preposition and connective as one independent word (the only exception sometimes being da), whereas Dunn generally writes them as suffixes on the preceding word. I have followed the intuitions of the Sm'algyax Language Teachers and written them as one independent word.
10. Since, in the simplified connective system, the preposition also occurs alone in the form a, it could be interpreted as a common noun indefinite connective form (see footnote 8). However, as I have found no corresponding proper noun indefinite form occurring, I have assumed that in the simplified set of prepositional connectives there are only the two connective forms as given.
11. There are two points which should be noted about this example. First, food fishing refers to "openings" (i.e. periods of time) when the Department of Fisheries allows native people to fish for their yearly food supplies. It is illegal to sell "food fish" or to give them to non-natives. Second, the particle dza weakens the force or emphaticness of a statement. It is found most often in imperatives and its use there is discussed in more detail in Chapter 3.
12. I am aware of the apparent inconsistency of these terms. However, I will still use them because they are traditional in the Tsimshian literature.
13. Dunn (1979d:227) takes this point further and states that:

If the 'n-element is in fact a determiner and a part of the pronominal, then we could refer to the definite objective series as marked and to the plain (indefinite) objective series as unmarked. If we could then extend this marking concept to distinguish between the objective (marked) series and the subjective (unmarked) series, we could say that pronominals are unmarked in nonpast tense/aspect. The plain objective series could then be said to express marked [As] or unmarked [Os] and [Ss]. According to this analysis, there are no exceptions

to the pristine general pattern: Tsimshian has kept its ergativity intact.

I do not agree with this use of markedness as I feel that it does not provide much insight into the data. I argue later in this section that the behavior of the A and O in indicative clauses can be analyzed in terms of the relative ranking of the A and O. I feel that this more accurately captures the facts in Coast Tsimshian than an analysis based on markedness.

14. Jelinek (1986) has proposed that there are two hierarchies governing word order in Nishga: (a) 1st, 2nd person > NP and (b) ergative arguments > absolutive arguments, with (a) taking precedence over (b). In Coast Tsimshian, (b) holds with two exceptions. First, if the A = 1st or 2nd person, the O = 3rd person and the clause is in the indicative, then both orders of pronouns occur: V+O+A and V+A+O (see (62a and b), respectively). Second, as noted in Section 2.2.2.1 and below in Section 2.4, there are a few sentences in Coast Tsimshian where the O NP > A NP, i.e. the word order is V O A instead of V A O. However, these sentences are rare. With respect to the hierarchy 1st, 2nd > NP, Coast Tsimshian must also include 3rd person: 1st, 2nd, 3rd person > NP or dependent pronominal arguments > lexical NPs as sentences such as the following illustrate:

Ła -t dzaba-d-it Doreen.
about-3 make -3-CN
A O PRED
Doreen is just about to make them right
now.

15. As Dunn (1979b) has observed, when the A is a proper noun and the O is a dependent pronoun, the dependent pronoun and the predicative connective marking the A coalesce. For example, in the sentence below, -ut is a contraction of -u + dit '1SG O + CN PRED':

Yagwa-t niidz-u -t Arnold.
PRES -3 see -1SG-CN
A O
Arnold is looking at me.
(Dunn 1979b:134)

If, in the present tense, the A is a common noun and the object is 1st person singular, the coalescence also occurs. Otherwise, the connective is replaced by the pronominal. For a listing of the various coalesced forms see Dunn (1979b:134).

16. Alternately, in (93a) the bound pronominal prefix, a- '3SG animate' can be said to show agreement with a \emptyset argument. Either analysis can be used here for the purposes of the discussion of ergativity.
17. Dunn (1979f:61) also claims that the grammatical agreement affix -t does not occur when a sentence contains an indirect object. The examples that he gives are all with one of the following tense/aspect markers: nah 'PAST', nah la 'PAST just', la 'PAST', or la dm 'about FUT'. However, with nah or nah la, I have found that the -t generally does not occur (see footnote 21) and with la 'PAST' and la dm 'about FUT' I have found that the -t is optional in casual speech (see below). Rather than a constraint dependent on the presence of an IO, I have found that it is dependent on the tense/aspect of the sentence.
18. Unfortunately, it is not clear to me what the discourse motivations are for these typologically unusual patterns of verb agreement.
19. Traces of reduplication are also found as a derivational process:
- | | | | |
|--------|----------|----------|----------------|
| baa | to run | babaa | to tremble |
| dziiws | daylight | dzidziws | still daylight |
- (For a fuller discussion see Dunn (1979f:27-31).) In addition, with a few verbs reduplication indicates, instead, a repeated action of the verb:
- | | | |
|--------------|-------------------|------------------------|
| <u>k'odz</u> | <u>k'odzk'odz</u> | cut |
| | | repeatedly cut, e.g. |
| | | slice fish for smoking |
20. Rigsby (1986:269) records for Gitksan a "similar sort of ergative (underlying subject or A) number agreement found in sentences where the reduplicated verb signifies the plural actions of plural agents,..." However, I have not found an analogous sort of number agreement in Coast Tsimshian.
21. Dunn (1979d) has proposed to handle this complexity in the marking of the dependent pronouns through the use of scaled features and a variable-like rule which operates when a specified threshold is reached. A pronominal A, and S or O is base-generated as a subjective or an objective dependent pronoun, respectively, and then changed in the appropriate environment by the rule. Scale values, as given in the rule's environment, accumulate arithmetically to the threshold, at

which point the rule operates. For example, nah 'PAST' is given a scale value of 5 and a 2nd person plural A with a lexical O is given a scale value of 2. Dunn found in Metlakatla, Alaska, where he collected his data in 1976, that the threshold was 6. As can be expected, the judgments of the different combinations of dependent pronouns vary somewhat from village to village and speaker to speaker.

Rather than listing the environments and assigning a scalar value, I feel that the complexity can be understood in terms of the relative ranking of the A and O and the various tense/aspect particles. As is argued in Chapter 4, the relative rankings of these two types of conditioning factors are related to broader principles operating in Coast Tsimshian and across languages in general.

22. In her cross-linguistic study, Bybee (1985:175) has also found that, "An uncommon feature of inflectional languages is to have a certain inflectional form used both in questions and in other contexts as well." In Sm'algyax, the distribution of the predicative connective -ɬ is, thus, unusual cross-linguistically.
23. There is also one nominalizing proclitic, huk 'one who Vs', which does not pattern ergatively. For example, the noun, huk'alubaa 'a fast runner', corresponds to the S of the intransitive verb 'alu-baa 'in front run', whereas the noun, hukdzap 'jack-of-all-trades', corresponds to the A of the transitive verb, dzap 'make, build' (Dunn 1978b:348-9). Since the derived nominals with this proclitic correspond to the S and A, respectively, it is an accusative rather than an ergative patterning proclitic.
24. Dunn terms this an 'antipassive' rule, but it should be recalled that this is not a productive morphological process, but a process relating some lexical items.
25. Mithun (1984) distinguishes four types of noun incorporation. In the first type, the incorporated noun reduces the number of arguments on the verb, while in the second type, the 'slot' vacated by the incorporated noun does not disappear, as in the first type, but, instead, is filled by some other argument of the clause such as a locative or a genitive. While the Coast Tsimshian data given here are not examples of productive noun incorporation, they are lexicalized incorporation and as such lexical items derived by SR 1 are similar to Mithun's Type I noun incorporation and lexical items derived by SR 2 and SR 3 to Type II in

corporation.

26. In contrast, Rigsby (1975:349) argues that Nass-Gitksan obligatorily incorporates indefinite transitive objects and indefinite intransitive subjects and that the incorporated structures all appear as intransitive verbs in surface structure. The only example he gives with an intransitive subject is with the verb is 'to stink'. However, the corresponding verb in Coast Tsimshian, is 'to smell like' is transitive, while the verb üüsk 'to stink' is intransitive, but does not allow the subject to be incorporated.
27. In all of the examples given in Boas (1911:365) the connective -m does not appear on the verb before the incorporated Ö.

Chapter 3 - Syntactic Ergativity

3.1 Introduction

In treating ergativity from a syntactic viewpoint, we are looking for syntactic phenomena in Sm'algyax which treat S and O alike, and differently from A. Analogously, syntactic accusativity means syntactic phenomena where S and A are treated alike, and differently from O. This distinction is connected with the general problem of subject identification which will be discussed in Chapter 4. In the present chapter, I examine a range of syntactic constructions to determine whether they are ergative or accusative.

In accessing the typology of a language, it is usually a relatively straightforward matter to determine whether it is ergative or accusative in terms of its morphological marking. However, at the syntactic level, making a decision as to whether a construction or process is ergative (S treated in the same way as O) or accusative (S treated like A) involves considering several different types of syntactic evidence which do not necessarily all give the same result. Following Dixon (1979), first, some syntactic operations must be identified as universally accusative. That is, in those languages where they occur, they always treat the S like the A. This is true of imperatives, jussive complements, and complements of 'want' and similar verbs.

here, though, I show in Section 3.2 that with imperatives, for example, there is an ergative aspect to this construction in Coast Tsimshian.

Next syntactic constructions and processes must be identified which have a universal basis that does not treat the S like the A, as in an accusative construction, or the S like the O, as in an ergative construction. For example, in the case of causatives, the universal basis is dependent upon the A and with reflexives it is dependent on the O.

Then syntactic operations must be identified which are language-particular as to whether they are accusative or ergative. These include coordination, subordination, relativization and topicalization. In most languages it seems, these processes function accusatively. But it is definitely not the case that all of these processes in all languages work in terms of S and A. Some languages function in terms of S and O for part or all of these processes and it is these languages which can be said to show syntactic ergativity. The degree of syntactic ergativity is then dependent on the number of syntactic operations which treat the S like the O. It is shown below that Coast Tsimshian is syntactically, as well as morphologically, ergative.

The final distinction to be made is syntactic operations which function to place an NP in an S function for a variety of syntactic and discourse purposes. These include passive and antipassive, which place an O or A in an S

'slot', respectively, producing an intransitive sentence. It is shown below that Coast Tsimshian lacks either of these operations and that functions which these operations typically serve in a language are handled in other ways in Coast Tsimshian.

The syntactic constructions and processes which have been categorized here are discussed in terms of the Coast Tsimshian language in the sections that follow. Sections 3.2-3.4 cover those operations which are universally accusative, Sections 3.5-3.6 those which are universally neither accusative nor ergative, and Sections 3.7-3.10 those which are language particular as to ergativity and accusativity. Then in Section 3.11, I consider the lack of a passive or antipassive process in Coast Tsimshian.

3.2 Imperatives

Imperatives, cross-linguistically, have a 2nd person pronoun as the stated or understood S or A who the speaker intends to get to perform an action. Thus, as Dixon (1979:112) states:

...the fact that S and A have the same possibilities of reference for the imperative constructions of some particular language (and the fact that, say, either can be deleted from surface structure) is no evidence at all for the placement of that language on a continuum of syntactic 'ergativity' vs. 'accusativity'. Even the most ergative language will treat S and A NPs of imperatives the

same. This follows from the meaning of imperatives (addressee is told to be agent)...

In Coast Tsimshian, there are five types of imperative constructions that are common in discourse and narratives. In each type the S or A is a 2nd person. In the first type, which corresponds to a canonical imperative, the tense/aspect is unmarked as in (1). In contrast, the second type is marked with the tense/aspect particle dm 'FUT', as in (2). In the third type, the emphaticness of the imperative is lessened by the preverbal particle dza 'weakens definiteness', as in (3). The fourth type is a periphrastic construction which can be translated as It would be good if you..., as in (4). And the last type is a negative imperative which is expressed by gyiloo 'don't', as in (5):

- (1)a. Amuxs -n.
listen-2SG
S
Listen.
- b. Sm -gyit -dax -yagwa aniis -it, damxl.
very-right-firmly-hold branch-DEM friend
there
Hold on to the branch tight, my friend. .
(A = 2SG)
- (2)a. Wayi, dm lisay-'n da k'oy.
well FUT watch-2SG CN 1SG
S PREP
Well, watch me.
- b. M dm lagax-lu-daa daaw.
2SG FUT both -in-put ice
A sides
Put ice on each side.
(Boas 1911:407)

- (3)a. Dza am -a -niidz-n.
 weakens good-CN-look -2SG
 definiteness = take care S
 Take care (of yourself).
- b. Wayi, dza bax -doog -n na
 well weakens up.along-bring-2SG POSS
 definiteness ground A
 Then bring up my box with my adze and my
- xbiis-du di -ɬ n -t'axwans-du di -ɬ
 -box -1SG and-CN POSS-adze -1SG and-CN
 POSS POSS
 hammer.
- dahüüs-u -t.
 hammer-1SG -DEM
 POSS
 (Boas 1912:136)
- (4)a. Aam dm k'yeexg-n -t.
 good FUT escape -2SG-DEM
 S
 It would be good if you escaped.
 (Boas 1911:407)
- b. Aam m -dm di -baal-t-ga, k'anayis, dm
 good 2SG-FUT also-try -3-DEM friend FUT
 A O
 It would be good if you tried it too, my
- ganamn-t.
 be -3
 good S
 friend, it will be fun.
- (5)a. Gyiloo baas -n.
 don't afraid-2SG
 S
 Don't be afraid.
- b. Gyiloo m dza goo-t.
 don't 2SG weakens go -3
 A definiteness to O
 Don't go there.

In each pair of examples, the first sentence is intransitive while the second is transitive. In each case, though, the S or A is the addressee of the imperative and appears

as a dependent pronoun, with the exception of (1b), where the addressee is an A and does not appear. It should be noted that the verb lisay 'watch', in (2b), is intransitive and takes a prepositional object, while the verb goo 'go to', in (5b), is transitive and takes a locative object.

The five types of imperative constructions can be differentiated in terms of a scale of politeness. The third and fourth types are the most polite, while the first and fifth types are the least so and the second type is intermediate.

In Sm'algyax, in addition to this universal S/A linkage, there is also one respect in which S and O are treated alike. In particular, in the first type of imperative construction the S and A must be 2nd person (the universal rule), but when the A is 2nd person singular it is always deleted whereas the S, like the O, is retained:¹

- (6)a. Yüü duus. (E)²
 hide cat
 Hide the cat. (A = 2SG)

- b. Sm yüü duus. (E)
 2PL hide cat
 Hide the cat.

- (7)a. Lümoom-i.
 help -1SG
 O
 Help me. (A = 2SG)

- b. Babuud-it.
 wait -3
 O
 Wait for him. (A = 2SG)

- (8)a. T'iin-a yaawxk-n. (E)
 now -CN eat -2SG
 ADV S
 Eat now.
- b. T'iin-a yaawxk-sm. (E)
 now -CN eat -2PL
 ADV S
 Eat now.
- (9)a. Liimi-n.
 sing -2SG
 S
 Sing.
- b. Liimi-sm.
 sing -2PL
 S
 Sing.

In (6) and (7), the addressee is an A and where it is singular, as in (6a) and (7a and b), it does not occur. When it is plural, as in (6b), though, it does occur and is marked with sm '2PL' which is part of the subjective dependent pronoun, m...sm '2PL'. Examples (8) and (9) illustrate that when the addressee is an S it must occur. This is true whether it is singular, as in (8a) and (9a), or plural, as in (8b) and (9b). The obligatory presence of the S is like that of the O, as in (7a and b) where it is singular and plural, respectively.

In summary, Coast Tsimshian follows the universal rule of treating the S and A the same with respect to possibilities of reference for the imperative construction. However, with respect to deletion of the A in this construction, it is ergative.

3.3 Jussive Complements

Jussive complement constructions can be regarded as indirect imperatives in that they have a main clause verb like 'tell' or 'order' as in I told him to get ready. and I ordered him to clean out his room. As Dixon (1979:114) has observed, the O of the main clause verb must be coreferential with the S or A of the verb in the subordinate clause. Since the subordinate clause describes an instruction that has been given to someone to do something, the S and A have the same possibilities of reference. Because this is a universal consequence of the meaning of jussives, it cannot be taken as evidence for the syntactic type of a particular language.

In Coast Tsimshian, there are two types of jussive complements. In the first type, the coreferential A or S in the jussive complement is not deleted as it is in English. The following examples illustrate this with an A in the subordinate clause which is coreferential with either the O, as in (10), or the indirect object, as in (11), in the main clause:

- (10) Ada wila-t sm -gyid -yaawłmx-t-ga a -t
and then-3 very-right-advise -3-DEM PREP-3
 A way O A
Then he strongly advised them not to look out

wa -gun -ksa-niitsg-at-ga.
not-toward-out-see -3 -DEM
 O
toward it.
(Boas 1912:210)

- (11) Da ɬa gawdi 'wiileeks-m yaak -t-ga,
 then PAST finish big -CN give.a -3-DEM
 ADJ potlatch S
 He finished the great potlatch,
- ada wil haw-t gi -sga na -waatg-a a
 and then say-3 DEM-CN POSS-guest-CN PREP
 S PREP PRED
 and then he told his guests to put up the great
- ɬa dm -t hayntg-a na -waatg-a 'wii
 about FUT-3 stand -CN POSS-guest-CN big
 A up PRED PRED
 stone totem pole.
- pts'aan-m loop-ga.
 totem -CN rock-DEM
 pole ADJ
 (Boas 1912:190)

In this type of construction the jussive complement is expressed as a prepositional phrase. In (10), the O in the main clause occurs as an objective dependent pronoun -t- '3' on the verb, yaawɬmx 'advise' and the coreferential A in the jussive complement occurs as a subjective pronoun -t- '3' on the preposition a. In (11), the indirect object in the main clause is nawaatg- 'guests' and the coreferential A in the jussive complement is also the full NP, nawaatg- 'guests'. Thus, with neither a dependent pronoun, as in (10), or a lexical NP, as in (11), is the coreferential A deleted in the jussive complement. When the coreferential argument in the jussive complement is an S, the same situation is found, i.e., the coreferential S is not reduced to a dependent pronoun or deleted.

In the second type of jussive complement, the subordinate clause follows the main-clause verb and the NP which

- (13) Mał -a n gun -sa -ałg -a łams -u.
 tell-CN 1SG CAUS-make-fire-CN son.in-1SG
 PREP A wood PRED law POSS
 Tell my son-in-law that I order him to get
 firewood.
 (Boas 1912:100)

The jussive complement is a prepositional phrase in (12) and (13) as it is in the first type discussed above. In (12), Gunaxnesmgyad is the O of the main clause, nah ła mał-dida...Gunaxnesmgyad 'he told Gunaxnesmgyad to...' and the A of the jussive complement wila dzabadas Gunaxnesmgyad 'Gunaxnesmgyad do it'. In (13), łamsu 'my son-in-law' is the O of the main clause, mał...łamsu 'tell my son-in-law to...' and the O of the jussive complement n gunsa'ałga łamsu 'I order my son-in-law to get firewood'. Here ałg- 'firewood' is incorporated into the verb.

In summary, in the first type of jussive, the coreferential A or S is not reduced to a dependent pronoun or deleted in jussive complements where it is coreferential with the O, or indirect object, of the main clause. In the second type of jussive complement, deletion does occur and the coreferential NP is an O in the main clause and a S, A or O in the subordinate clause. Thus, in the first type where Coast Tsimshian follows the universal tendency whereby S and A have the same possibilities of reference, it does not allow the deletion of the coreferential element, but in the second type, where deletion is allowed, the coreferential NP may be an S, A or O and this type is, there-

fore, neither ergative or accusative.

3.4 'Want' and Similar Verbs

In a number of languages, certain verbal forms that are dependent on another verb may lack an overt S or A, if and only if the S or A of the dependent verb is the same as the S of the main verb. For example, in English, the verbs try and want behave in this way:

(14)a. The little girl tried to swim across the pool.

b. The students tried to finish the exam in time.

(15)a. The baby wants to walk.

b. The babysitter wants to watch the movie.

Where the S or A of the dependent verb is not the same as that of the main verb, as is possible with want, the S or A of the dependent verb must be expressed overtly (in English, as the O of want):

(16)a. The man wants the salesman to leave.

b. The salesman wants the man to buy his product.

As these examples illustrate, this condition treats the S and A of the dependent verb alike, in contrast to the O.

In Coast Tsimshian, there are two types of constructions with 'want' and similar verbs: if the agentive argument of a verb such as hasax 'to want' is coreferential with the S of the complement clause then this clause will occur as the object of hasax 'to want' and the agentive argument is an A. However, if the agentive argument of hasax

'to want' is coreferential with the A of the complement clause or is not coreferential with either the S or A, then the complement clause occurs as a prepositional phrase and the agentive argument is an S. The first situation occurs in (17) and (20), whereas the second occurs in (18)-(19) and (21)-(22). With respect to deletion, when the agentive argument of hasax 'to want' is coreferential with the S or A of the dependent clause, there is no deletion, as in (17) and (18), respectively. There is no deletion even when the NP in the dependent clause is 3rd person, as in (19). But the S or A in the dependent clause does reduce to a dependent pronoun if it is a lexical NP, as in (20). With respect to a non-coreferential NP in the complement clause, it appears in the prepositional clause rather than as an O in the higher clause as in English. This is illustrated in (21) with an S and in (22) with an A:

- (17) Hasag-u dm di galmiilg-u.
 want -1SG FUT on.my play -1SG
 A part S
 I want to play.

In (17), the A of hasag- 'to want' is a 1st singular dependent pronoun, the O is the complement clause, dm di galmiilgu 'I on my part will play', and the main clause A is coreferential with the S, -u '1SG' in the complement clause.

- (18) Ndo małat-as noo -n a hasag-ayu
 go.on tell -CN mother-2SG PREP want -1SG
 PRED POSS S
 Go and tell your mother that I desire

da n dm 'yagay -naksg-n.
 CN 1SG FUT however-marry-2SG
 PREP A O
 to marry you.
 (Boas 1912:78)

In (18), the clause with hasag- 'to want' and its complement is itself a prepositional phrase of the main clause ndo małalas noon a... 'go tell your mother that...'. The argument of hasag- 'want' is 1st person singular and is an S which is coreferential with the A in the prepositional complement clause da n dm 'yagaynaksgn 'I will marry you.' (Note that in this example and in (21), the -a- before the dependent pronoun in hasagayu 'I want' is an epenthetic vowel.)

(19) Hasax-t-ga dm -t moga -n -t-ga.
 want -3-CN FUT-3 go -CAUS-3-DEM
 S PREP A aboard O
 He wanted to take him aboard.
 (Boas 1912:126)

In (19), the S of hasag- is a 3rd person dependent pronoun which is coreferential with the A, -t on dm 'FUT' in the prepositional clause ga dmt mogantga 'he will take him aboard'.

(20) Hasag-a awta dm yeltg -it da lax
 want -CN porcupine FUT return-3 CN place
 PRED S PREP
 Porcupine wanted to return to the mainland.
 galts'ap.
 village

The A of hasag- 'to want' is a full lexical NP in (20) and is coreferential with the dependent pronoun -t '3' suffixed to yeltg- 'to return' in the object complement dm yeltgit

da lax galts'ap 'he wanted to return to the mainland'.
 (The -i- before the dependent pronoun in yeltgit 'it re-
 turn' is an epenthetic vowel.)

- (21) Ada hasag-ayu da dm lu-hat'ak -laatg
 and want -1SG CN FUT in-lengthwise -move
 PREP along.middle
 I want you to creep in.

-n.
 -2SG
 S
 (Boas 1912:180)

- (22) Daal, meɬ-a hasag-ayu da dm -t bax
 dear say-CN want -1SG CN FUT-3 up.along
 PRED S PREP A ground
 My dear, say that I wish [for] my son-in-law

-good -a ɬams -u mati hu-waald-a
 -go.to -CN son.in-1SG mt. PL-be -CN
 place PRED law POSS goat PRED
 (trans)
 to go up for the mountain goats there in the

da gyilhawli, a wul n k'oomtg-a sami
 CN woods because 1SG desire -CN meat
 PREP A PRED
 woods, because I desire mountain goat

-m mati di -ɬ yeey-a mati."
 -CN mt. and-CN fat -CN mt.
 ADJ goat ADJ goat
 meat and mountain goat tallow."
 (Boas (1912:88)

The S of hasag- in (21) and (22) is a 1st person singular
 dependent pronoun and is not coreferential, in (21), with
 the S of the prepositional complement which is a 2nd sing-
 ular dependent pronoun on the verb laatg- 'to move' and, in
 (22), with the A of the prepositional complement which is
 the lexical NP ɬamsu 'my son-in-law'.

To summarize, verbs like 'want' in Coast Tsimshian be-

have like similar verbs cross-linguistically, in that they take a complement in which the S or A of the dependent verb can be coreferential with the agentive argument of want. In this respect, Sm'algyax follows the universal tendency to group S with A as arguments that can be coreferential with the agentive argument of want. However, unlike a number of languages, this language does not allow deletion of the coreferential NP, but only a reduction to a pronoun if it is a full lexical NP. Similarly, a non-coreferential S or A stays in the complement clause and does not appear in the higher clause as an O, like in English.

However, counter to the universal tendency, Coast Tsimshian also shows some non-accusative tendencies with respect to this construction: if the argument of a verb like hasax 'to want' is coreferential with the S in the complement clause, then the clause is the O and the agentive argument of hasax 'to want' is marked as an A, but if the agentive argument of hasax 'to want' is coreferential with the A in the complement clause or is not coreferential with either the S or A, then the dependent clause occurs in a prepositional phrase and the agentive argument of hasax 'to want' is marked as an S. That is, this construction differentiates between an argument in the complement clause that is a coreferential S and one that is a coreferential A or a noncoreferential S or A.

3.5 Causatives

Causatives are universally dependent on the A in that the A is semantically the referent of the 'causer NP' which makes the event happen. As Dixon (1979:116-7) has observed:

Many languages have a productive mechanism for deriving a transitive causative verb from an intransitive verb (The door opened --> The man opened the door) or from an adjective (The wall is black --> I blackened the wall). In addition, a number of pairs of lexical roots usually show the same relation (e.g. in English, fell = make fall, kill = make dead). Here the S NP of the intransitive sentence (e.g. The tree is falling) corresponds to the O NP of the corresponding causative (The woodman is felling the tree); this has been taken as evidence for 'ergative syntax'... But the identification of 'S = O' and 'causer = A' is a universal feature of causative constructions; it does not provide evidence as to the syntactic 'ergativity' or 'accusativity' of any language...

Now, in Coast Tsimshian, there are two processes of forming transitive causative verb stems from intransitive ones. The first, which was discussed in Section 2.8.2, consists of suffixing -n 'CAUS' to an intransitive verb. For example, (24) contains a transitive causative verb formed from the intransitive verb in (23):

- (23) Ada-t wil 'yaga -t'uus-t-ga a 'wii
and-3 then down.along-push -3-DEM and greatly
A O
Then he pushed them down, and the mountain

ɬoo -ga mati gi -sga na -wagayt -na
 slide-CN mt. DEM-CN POSS-entirely-along
 PRED goat PRED
 goats really slid down to the place all along

-stoo-sga 'wi -sganiist-ga.
 -one -CN great-mountain-DEM
 side POSS
 one side of the great mountain.
 (Boas 1912:94)

- (24) Sugya'wn da ɬoo -n -d-a mati-t.
 at.last then slide-CAUS-3-CN mt. -DEM
 A PRED goat
 At last he slid the mountain goats down.
 (Boas 1912:142)

In (23), ɬoo- 'to slide' is intransitive, and the S is mati 'mountain goats', whereas in (24), it is transitive with the causative suffix -n, mati 'mountain goats' is the O, and the A, -d- '3' on the verb, is the causer. However, the addition of the -n suffix is not a productive morphological process, but rather a process relating some lexical stems.

A productive process of forming causative stems involves the proclitic gun 'CAUS', as in (25). This proclitic can also be used with a causative sense of ordering as in (26). In each case, the A is the causer and the O corresponds to either the O or the S of a simple transitive or intransitive sentence as in (27) and (28), respectively.

- (25) Dm gun -niits'-a'nu da k'wan di lp na
 FUT CAUS-see -1SG CN 2SG on.my own POSS
 = show A PREP part
 I will show you my own playground over there.

 -haligalmiilg-u a gwii.
 -playground -1SG PREP there
 POSS

- (29) Dawla gun -t'aa lgu 'wileeks da n -dzoog
 then toward-sit = old man CN POSS-edge
 PREP

The old man sat down close to the shore.

-a aks.
 -CN water
 POSS

- (30) Gun -deentg -ad-at nagwaat da n -dzoog
 toward-lead.by-3 -CN father CN POSS-edge
 hand A PRED PREP

He guided his father to the water's edge.

-a aks.
 -CN water
 POSS

As these examples illustrate, the occurrence of gun with this locative sense does not change a one-place predicate into a two-place one with the identification of the S and the O or a two-place predicate into a three-place one with the identification of the A and the indirect object.

In summary, there are two processes for forming causative constructions in Sm'algyax: the first, with the suffix -n, relates intransitive verb stems to transitive ones; whereas the second, with the proclitic gun, forms transitive verbs from intransitive ones and transitive predicates with an indirect object from simple transitive ones. In each type, with a transitive causative verb, the O = S and the causer = A. However, as noted in the beginning of this section, this is a universal feature of causative constructions and should not be taken as evidence of syntactic ergativity in Coast Tsimshian. However, it can be concluded that this language does agree with the universal tendencies

found to hold for causative constructions.

3.6 Reflexives

In his cross-linguistic study of reflexives, Faltz (1985) characterizes reflexive clauses as expressing a two-argument predication in which one argument is an agent or experiencer, the other is a patient, and some grammatical device exists which specifically indicates that the agent-experiencer and the patient have the same reference. A language may mark the coreference of the two arguments in one of two ways: either (i) in the patient noun phrase, in which case the clause is transitive and both noun phrases occur overtly, or (ii) solely in the verb, in which case the clause is intransitive and only the agent/experiencer noun phrase occurs. In either case, however, it is the co-referential patient noun phrase which is either marked or unexpressed.

Cross-linguistically, then, reflexives are dependent on the O in that either the patient NP is not expressed and the agent/experiencer is expressed as the S of the resulting intransitive construction with the reflexivization indicated in the verbal morphology, or the patient NP occurs in a reflexive form and the A serves as the antecedent of the reflexivization. Since it is the O which is either marked for reflexivization or is unexpressed, this has been taken by some as evidence for accusative syntax (e.g.

Anderson 1976:14-6). However, as Faltz's study shows, the behavior of the O is a universal tendency and does not provide evidence as to the syntactic ergativity or accusativity of a language.

In Coast Tsimshian, two different reflexive constructions are found. In the first, the O is an independent pronoun and the proclitic lap 'REFLX' occurs with the verb, as in (31) and (32):

- (31) Lap niidz-a ɬguwoomɬg-at 'niit. (E)
REFLX see -CN child -CN 3SG
 PRED PRED
The child sees her/himself.

- (32) Lap di-daalg-m dp 'nüüm. (E)
REFLX PL-talk -1PL PL 1PL
We are talking to ourselves.

In (31), the A is a lexical NP, ɬguwoomɬg- 'child', whereas, in (32), it is a dependent pronoun, -m '1PL'.

The proclitic lap also occurs with an emphatic meaning in sentences which are not syntactically reflexive. As the examples in (33) and (34) illustrate, lap refers to the S or A of the sentence, respectively:

- (33) Gyiloo baas -n, di lap -naxnoox -a'nu.
don't be -2SG on.my EMPH-have.superna-1SG
 afraid S part tural power S
Don't be afraid, I have supernatural power
myself.
(Boas 1912:100)
- (34) Ada di -t lap -gap-sga na -stoo-t -ga.
and on.her-3 EMPH-eat-CN POSS-half-3 -DEM
 part A PRED POSS
And she herself ate the other half.
(Boas 1912:72)

In the second type of reflexive construction, the pa-

tient NP does not occur, the clause is intransitive, and the proclitic gyilk 'REFLX', as well as the proclitic lap, occur with the verb:

- (35) Lap gyilk niis-ga lguwoomk. (E)
 REFLX REFLX see -CN child
 PRED
 The child sees her/himself.

- (36) Lap gyilk di-daalg-'nm. (E)
 REFLX REFLX PL-talk -1PL
 S
 We are talking to ourselves.

In (35) and (36), which correspond to (31) and (32), respectively, the patient NP does not occur and the reflexive sentences are intransitive. This is signaled by the difference in predicative connective in (35) as opposed to (31) and the use of an objective pronoun in (36) rather than a definite objective pronoun as in (32).

The proclitic gyilk, like lap, also occurs in sentences which are not reflexive. In this case it has a meaning of 'back':

- (37) Ndo, lu-yeltg-n, hawin na -gyilks-niidz-n.
 go on in-turn -2SG before 1SG-back -look -2SG
 = return S A at O .
 Go back, lest I look back upon you.

- (38) Alga nasigoo-s Waxayeek ał haw-ł naks
 not mind -CN potlatch CN say-CN spouse
 PRED giver PREP PRED
 Potlatch-Giver did not mind what his wife said

-t as 'niit, awil hasax-d-ida dm -t
 -3 CN 3SG because want -3-CN FUT-3
 POSS PREP S PREP A
 because he desired to take

from the second clause:

- (39) The maid dusts.
- (40) The maid changes the sheets.
- (41) The dog barked.
- (42) The cat hissed at the dog.
- (43) The maid dusts and changes the sheets.
(39)+(40)
- (44) The maid changes the sheets and dusts.
(40)+(39)
- (45) The dog barked and the cat hissed at it.
(41)+(42)
- (46) The cat hissed at the dog and it barked.
(42)+(41)

The relevant criterion for this kind of deletion is that if the two simple sentences have the same S or A, then the S or A of the second clause in the coordinate construction is omitted. Since (39) and (40) have the same S and A, they can be coordinated to give (43) or, with reverse order of the clauses, (44). It is not possible, however, to delete the repeated argument when (41) is coordinated with (42) as in (45), or in the reverse order as in (46). Instead, the repeated argument can only be reduced to a pronoun. Although both (41) and (42) contain the NP, dog, this NP is the S in (41) but the O in (42). In other words, deletion across conjunctions in English operates on an accusative basis.

In Coast Tsimshian, coordination of clauses is indicated by ada 'and' and occasionally by a 'PREP':

- (47) Baa 'yuuta ada goos-a ganaw.
 run boy and jump-CN frog
 PRED
 The boy ran and the frog jumped.
- (48) Ada wil lu-tgu -loo -sga 'wii st'ool
 and then in-around-swim-CN great beaver
 PRED
 Then great beaver swam around in the big
- gi -sga 'wii-ts'm-t'aa, a 'li t'aa-sga
 DEM-CN big -in -lake and on sit -CN
 PREP PREP
 lake and porcupine was
- awta gi -sga lax hakoo-t.
 porcupine DEM-CN on back -3
 PREP POSS
 on his back.

With this type of clause linkage, there are no restrictions on the syntactic role of the coreferential NP and this NP is only reduced, not deleted, in the second clause. First, there is no change in the coreferential S or A in the second clause when it is a dependent pronoun in the first clause. This is the case regardless of whether both clauses are intransitive as in (49), transitive as in (50), or one is intransitive and the other is transitive as in (51):

- (49) Ba 'wileeks-u ada suuns-u.
 PAST be.old -1SG and be -1SG
 S blind S
 I am old and blind.
- (50) Dawla-t sa -spiil gahuu -m noł da gayk
 then -3 off-pull necklace-CN shell CN chest
 A ADJ PREP
 Then he pulled a shell necklace from his chest
- t ada-t gun -ooy -t da awa ts'u'uts.
 3 and-3 toward-throw-3 CN near bird
 POSS A O PREP
 and threw it to the bird.

- (51) Dawla 'naka -t ga-an'on lgułg-m 'yuut ada
 then reach.out-3 PL-hand young-CN man and
 with.hand A ADJ
 He reached for the boy's hands and stood up.
 haaytg-it.
 stand -3
 up S

In (49), both clauses are intransitive and the S in each is -u '1SG', whereas, in (50), both clauses are transitive and the coreferential A in each is -t '3'. The first clause in (51) is transitive and the A, -t '3' is coreferential with the S, -it '3' in the second clause. (The -i- in the -it '3' is an epenthetic vowel.)

If the S or A of the first clause, however, is a lexical NP, then it is reduced to a dependent pronoun in the second clause. Again this is the case regardless of whether the clauses are intransitive as in (52), transitive as in (53), or a combination as in (54):

- (52) Mo'mg-a hana'a ada miilk-t.
 smile-CN woman and dance-3
 PRED S
 The woman smiled and danced.
- (53) Gyiimkł-as Galganms Hayda lgu mati ada-t
 wipe -CN kid mt. and-3
 PRED goat A
 Galganms Hayda wiped the mountain goat kid dry
 ludam -t.
 comfort-3
 O
 and comforted it.
- (54) Ada wil dzaga -yaa-sga awta -ga, ada-t
 and then across-go -CN porcupine-DEM and-3
 PRED A
 Then porcupine walked across, and

dzaga -goo n -sm -lax-yuup-t -ga.
across-go POSS-real-on -land-3 -DEM
to POSS
went across to his country.

In (52), both clauses are intransitive and the S of the first clause, hana'a 'woman', is reduced to a dependent pronoun, -t '3' in the second. Similarly, in (53), where both clauses are transitive, the A of the first clause, Gal-ganms Hayda, is reduced to a dependent pronoun, -t '3' in the second. In (54), the first clause is intransitive and the S, awta 'porcupine' is reduced to a dependent pronoun, -t '3' in the second clause where it is the A.

The occurrence of a coreferential NP and the reduction of a full lexical NP to a dependent pronoun in the second clause is not limited to the S or A, though. As is illustrated in (55) and in (50) and (53) above, the O can also be coreferential and can be reduced:

- (55) Niidz-u suwilaay'msk, ada di -t niis-d
 see -1SG teacher and on.her-3 see -TRANS
 A part A =look at
 I see the teacher and she is looking at me.
- u.
 -1SG
 O

In this example, not only is the O, suwilaay'msk 'teacher' reduced to a dependent pronoun -t '3' in the second clause, but it also switches syntactic roles from O to A.³ Thus, not only are there no restrictions on the syntactic role of the coreferential NP switching from A to S as in (51) or from S to A as in (54), but it can also

switch to O.

To summarize, the syntactic process of clause coordination in Sm'algyax does not restrict the syntactic role of the coreferential S, A or O and does not allow deletion of this coreferential NP in the second clause. Instead, if the S, A or O is a lexical NP, then it is reduced to a dependent pronoun. However, since the reduction is not restricted to the S and A, as in an accusative process, or the S and O, as in an ergative process, this syntactic process is neither accusative or ergative and does not provide evidence as to the syntactic orientation of Coast Tsimshian.

3.8 Subordination

As with coordination, some languages require that if two clauses are related in a subordinate construction and have an NP in common, then the coreferential NP may be restricted as to its syntactic function or there may be conditions on deletability of one occurrence of this NP.

With subordination in Coast Tsimshian, as with coordination, there are no restrictions on the syntactic role of the coreferential NP. Further, if this NP is lexical, the second occurrence of it will be reduced to a dependent pronoun. In Sm'algyax, there are four ways of linking two clauses to form a complex sentence: with the preposition a as in (56), with a prepositional connective as in (57),

with a clause-initial conjunction as in (58), or, as was shown in Section 3.4, by simply juxtaposing the two clauses as in (17), repeated here as (59):

- (56) Haytg-a hana'a a 'wiihawtg-it.
 stand-CN woman PREP cry -3
 up PRED S
 The woman was standing [there] crying.

In (56), both the main clause and the prepositional clause are intransitive and the S, hana'a 'woman', is reduced to a dependent pronoun, -t '3', on its second occurrence in the prepositional clause.

- (57) Ada nda dza dzaga -yaak-it gi -sga
 and no weakness across-go -3 DEM-CN
 way definiteness S PREP
 He couldn't go across there

 dm -t goo-sga gyilhawli-t -ga.
 FUT-3 go -CN bushes -3 -DEM
 A to PRED POSS
 to go to his bushes.

In (57), the first clause is intransitive and the S is marked by -it '3' on the verb yaak 'go', whereas the subordinate clause introduced by the prepositional connective -sga is transitive and the A, -t '3' on dm 'FUT' is coreferential with the S in the main clause. (The -i- in -it '3' is an epenthetic vowel).

- (58) Smgal baas -a'nu-t, opdza dzag-i.
 really be -1SG -DEM lest die -1SG
 afraid S
 I am really afraid, lest I die.

Both of the clauses in this example are intransitive and the S in the main clause is a definite objective dependent pronoun, -a'nu '1SG' (the -a- is epenthetic), while the

coreferential S in the subordinate clause is -i '1SG', since this clause expresses a potential event that is unlikely to happen.

- (59) Hasag-u dm di galmiilg-u.
 want -1SG FUT on.my play -1SG
 A part S
 I want to play.

In (59), since the argument of hasag- 'to want' is coreferential with the S of the subordinate clause, the argument is an A and is expressed by -u '1SG' on hasag- 'to want' and the subordinate clause is the O of hasag- 'to want'. Within the subordinate clause, the S is expressed by -u '1SG' on the verb, galmiilg- 'to play'.

Finally, while the clauses are not required to have an NP in common, in the great majority of instances, complex sentences link descriptions of events which do have some common participant. This is illustrated in (56)-(59) where all of the clauses contain a coreferential NP.

That there are no restrictions on the syntactic role of the coreferential NP is illustrated in (56)-(59) and in (60):

- (60) Ada la dm dzak-sga lgu gwe'a-m
 and about FUT die -CN little poor -CN
 PRED ADJ
 And poor little porcupine_i was about to die,

 awta, da -t wil ksa-'ooy -t da txa
 porcupine when-3 that out-throw-3 CN down
 A of O PREP out of
 when he threw him_i out of his den.

 -'ax -sga n -ts'ap-t.
 -mouth-CN POSS-den -3
 POSS POSS

In (56) and (58) the S of the main clause is coreferential with the S of the subordinate clause, whereas in (57) it is coreferential with the A of the subordinate clause. Similarly, the A of the main clause in (59) is coreferential with the S of the subordinate clause. That the lack of restrictions includes the O is shown in (60), where the S, awta 'porcupine', of the main clause, Ada la dm dzaksga tgu gwe- 'am awta 'And poor little porcupine was about to die', is coreferential with the O, -t '3', on the verb ksa'ooy 'to throw out' of the subordinate clause, dat wil ksa'ooyt da txa'axsga nts'apt 'when he threw him out of his den'.

That the coreferential NP is not deleted but is only reduced if it is a full lexical NP is likewise shown in (56)-(60): the main clause S in (56) is a lexical NP, hana'a 'woman', and is reduced to a dependent pronoun, -it '3' on the verb wiihawtg- 'to cry' in the subordinate clause. In (57)-(60), the S or A of the main clause is a dependent pronoun and the coreferential NP in the subordinate clause is not deleted but also occurs as a dependent pronoun.

To summarize, like coordination, the syntactic process of subordination in Coast Tsimshian does not restrict the syntactic role of the coreferential S, A or O and does not allow deletion of the coreferential NP in the subordinate clause. Instead, if the S, A or O is a lexical NP, then it is reduced to a dependent pronoun. However, since the

reduction is not restricted to the S and A, or the S and O, it is neither an accusative or an ergative process and does not provide evidence as to the orientation of Sm'algyax syntax.

3.9 Topicalization

Topicalization is a syntactic process that gives prominence to a particular NP within a sentence. The syntactic strategies for giving such prominence can be the same for an A, S or O (i.e., neither ergative or accusative), they can treat the S in the same way as an O (i.e., ergative), or they can treat the S in the same way as an A (i.e., accusative). The different strategies might distinguish between whether an A, S and O can all be topicalized, whether all types of NPs such as full NPs as well as pronominals can be topicalized, and how the different topicalized NPs are marked.

In Coast Tsimshian, the relevant parameters for topicalization are what type of NP is given prominence, whether or not there is a topic marker, and the marking of the connectives and person agreement. With regard to the first parameter, full NPs, independent pronouns, and the sentence initial demonstrative pronoun ni'nii can all be topicalized regardless of whether they function as an A, S or O.⁴ For example, the full NP that is topicalized is an A in (61), an S in (62) and an O in (63). In (64), the topical-

the S, awta 'porcupine', and the O, waab 'house', occupy this position, respectively. In (64) the S, 'nüüyu '1SG', has been topicalized and in (65) it is the O, ni'nii 'DEM PRO' which has been given prominence.

While there is no distinction between an A, S or O as to what type of NP is given prominence, there is a distinction made with respect to the presence of a topic marker. As is illustrated in (61), when an A is topicalized there is a topic marker in 'TOP', whereas with a topicalized S or O, as in (62)-(65), there is no topic marker.

The marking of person agreement and the connectives is also sensitive to whether the topicalized NP is an S, A or an O. First, when an S is topicalized, it occurs in preverbal position and the verb is suffixed with a 3rd person dependent pronoun, -t '3', as in (62) and (64). The -t cannot be interpreted as a predicative connective since it occurs regardless of whether the topicalized S is an independent pronoun (which is marked as a proper noun), as in (64), or it is a common noun, as in (62). In addition, the -t could only be interpreted as a predicative connective in the reduced system of connectives. However, examples such as (62) and (64) are from texts which use the full system of connectives. It might also be claimed that the -t in (64) is a sentence-final demonstrative, but in examples such as (66) where the sentence-final demonstrative is -ga, the -t '3' still occurs:

- (66) Ada 'wii sgüü -t-ga.
 and great be.lying-3-DEM
 one down S
 And the great one lay there.

When an A is topicalized, the A occurs in preverbal position and the subjective dependent pronoun, -t '3', marking person agreement with the A, shows some interesting variations which are discussed below. Connectives do not occur with a topicalized A except in one example, (61), where this connective is still present when the A is topicalized. In all of the other examples with a topicalized A that I have found in texts, the only predicative connective which is present marks the following O:

- (67) T 'nüüyu-t in k'yil-k'yinaam yats'isg-a
 3 1SG -3 TOP PL -give land CN
 A A PREP
 I am the one who has given the animals to you,

 da k'wan, gu ła wila wu-waay-n da
 CN 2SG REL PAST that PL-find-2SG CN
 PREP A PREP
 that you find in the bark you are

 sa-sa -maas-n.
 PL-make-bark-2SG
 S
 gathering.
 (Boas 1912:78)
- (68)a. T 'nüüyu dm -t in naks -ga ɭguuɭg -n -t.
 3 1SG FUT-3 TOP marry-CN daughter-2SG-DEM
 A A PRED POSS
 It is I who will marry your daughter.
 (Boas 1911:365)
- b. "'Nüüyu dm -t in naks -ga ɭguuɭg -n -t,
 1SG FUT-3 TOP marry-CN daughter-2SG -DEM
 A PRED POSS
 I am the one who will marry your daughter,

Gawo," daya ɬgu ts'apts'ap.
 say little wren
 Gawo," said the little wren.
 (Boas 1912:198)

There are several different variations with the subjective dependent pronoun -t '3' when the A is topicalized. The most formal version is illustrated in (67) and (68a), where the -t '3' occurs before the topicalized A, 'nüüyu '1SG', as well as in the usual place, suffixed to the word preceding the topic marker in. This 'double' marking of -t '3' has only been found with a topicalized A that is an independent pronoun. Further, this variation is restricted to the oratory style of speech and even here it is optional, as is shown in (68b) where the -t '3' only occurs suffixed to dm 'FUT'. The t that occurs before the topicalized A can not be interpreted as a predicative connective, as Dunn (1978b:336) has suggested, since examples such as (67) and (68a) are from texts which use the full system of connectives, and the t could only be interpreted as a predicative connective in the reduced system of connectives.

In Sections 2.4 and 2.5.2, it was shown that the occurrence of the person agreement marker -t was conditioned by the tense/aspect of the sentence and by the semantic content of the A and O relative to each other. This was summarized in a chart which is repeated in (69):

(69) Person Agreement across Tense/Aspect

nah nah ʔa ø dm ʔa dm ʔa yagwa

Person ← occurs if 0 > A * ← optional in → required
Agreement casual speech

Specifically, with nah 'PAST', nah la 'PAST just' and Ø 'NonFUT', the t only occurs if the O outranks the A in terms of the argument hierarchy; with dm 'FUT', la dm 'about FUT' and la 'PAST', the t is optional in casual speech; and, with yagwa 'PRES' the t is always required.

The same conditions on the occurrence of -t occur when the A is topicalized with the following exception: When the tense/aspect is \emptyset 'NonFUT', the -t is optional in casual speech regardless of the semantic content of the A and O relative to each other. That is, with topicalized As the restrictions on the occurrence of -t can be summarized as in (70):

(70) Person Agreement with a Topicalized A

nah nah ʔa Ø dm ʔa dm ʔa yagwa

Person Agreement ← occurs if $0 > A$ → optional in casual speech → required .

This is illustrated in (71)-(75):

- (71) 'Nüüyu nah in dzab-a waab.
1SG PAST TOP make-CN house
A PRED
I'm the one who built the house.
(Dunn 1978b:337)

- (72)a. 'Nüüyu dm -t in baa-'n boot.
 1SG FUT-3 TOP run-TRANS boat
 A
 I am the one who will run the boat.
 (Dunn 1979f:68)
- b. 'Nüüyu dm in baa-'n boot.
 1SG FUT TOP run-TRANS boat
 I am the one who will run the boat.
 (Dunn 1979f:68)
- (73) 'Nüüyu-t in gwantg-a latab.
 1SG -3 TOP touch -CN table
 A PRED
 I am the one who touched the table.
 (Dunn 1978b:336)
- (74) Kamksa awta in -t wülay-sga wila
 just porcupine TOP-3 know -CN be
 A PRED
 Only porcupine was the one who knew how to
 waal-t-ga, awil 'nak'nuunk-sga na -ga-laxs
 do -3-DEM because long -CN POSS-PL-claw
 S PRED
 because his claws were long.
- t -ga.
 -3 -DEM
 POSS
- (75) 'Nüüyu in hooy gantamiis.
 1SG TOP use pencil
 I am the one using the pencil.

The t does not occur in (71) where the tense/aspect is nah 'PAST' and the A > O, which is in contrast to (72a and b) where it is optional as the tense/aspect is dm 'FUT'. When the tense/aspect is \emptyset 'NonFUT', the t occurs as a suffix on the topicalized A, 'nüüyu '1SG', in (73); as a suffix on the topic marker, in 'TOP', in (74); as a suffix on both, in (61) above; or need not occur at all, as in (75).

To summarize, with a topicalized A, connectives are

not found to be part of the topicalization process, except in (61), whereas the person agreement marker, -t '3', does occur and is conditioned by the tense/aspect of the sentence, the semantic content of the A and O relative to each other, and whether the speech style is formal or casual.

When an O is topicalized, a predicative connective is optionally suffixed to the O and the subjective dependent pronoun t marks a full NP A, as is summarized in (70) above. In (65), the topicalized O, ni'nii 'DEM PRO' is suffixed with the predicative connective -sga. Here the A is a dependent objective pronoun, -t '3', so there is no person agreement with the A. However, in (76), below, the A, ol 'bear' is a full NP and -t is suffixed to ada 'and' to mark the agreement. The topicalized O, 'niit '3', is also suffixed with the predicative connective -a in this example:

- (76) Ada-t 'niid-a nah niidz-a ol.
 and-3 3 -CN PAST see CN bear
 A PRED PRED
 He's the one the bear saw.
 (Dunn 1978b:343)

In conclusion, the various strategies involved in topicalization in Coast Tsimshian can be the same for an A, S or O (i.e., neither ergative or accusative), they can treat the S in the same way as an O (i.e., ergative), or they can treat the S in the same way as an A (i.e., accusative). First, it was shown that all three arguments, A, S and O, can be topicalized and that there is no restric-

tion as to the type of NP that can be topicalized. In this respect, topicalization is neither ergative or accusative in Sm'algyax. Next, it was shown that when an S or an O is given prominence in a sentence there is no topicalization marker, but with an A there is. The use of a topicalization marker is, therefore, ergative in Sm'algyax. Connectives were found to be part of the topicalization process only with a topicalized O, where they are suffixed to the O. As the S and A are not specially marked with connectives, this is an accusative strategy. Finally, with regard to person agreement it was shown that a topicalized S or A is marked for agreement, although with different conditioning factors, whereas a topicalized O is not. This, then, is an accusative strategy. Thus, topicalization in Coast Tsimshian is a process which has both ergative and accusative characteristics as well as characteristics which are neither ergative or accusative.

3.10 Relativization

Relativization in Coast Tsimshian is similar to topicalization with regard to the various syntactic and morphological aspects of the process. These include what type of NP can occur as the head of a relative clause, whether or not there is a relative clause marker, and the marking of the connectives and person agreement. These aspects can be the same for an A, S or O (i.e. neither ergative or accusative).

tive), they can treat the S in the same way as an O (i.e. ergatively), or they can treat the S in the same way as an A (i.e. accusatively). As with topicalization, the following discussion shows that the strategies involved in relativization in Sm'algyax range over all three of these possibilities.

First, full NPs, independent and dependent pronouns can all occur as heads of relative clauses. There is no restriction as to whether the head functions as an A, S or O in the dependent relative clause. For example, the full NP that is relativized is an A in the relative clause in (77), an S in (78), and an O in (79). In (80), the head of the relative clause is a dependent pronoun.

- (77) Ada-t 'nax'noo-da txa'nii na -gyed -a
 and-3 hear -CN all POSS-people-CN
 A PRED POSS
 And all the people of the Skeena
 ksian wil waal-sga t'apxadool-tga hana'ang-t
 Skeena that do -CN two -CN women -3
 river PRED ADJ A
 heard what the two women who had found
 in waay Hatsenas.
 REL find
 Hatsenas were doing.
 (Boas 1912:80)

- (78) Ada sgüü-t, siipg-it gi -sga n -ts'm-waab
 and lie -3 sick -3 DEM-CN POSS-in -house
 down S S PREP
 And he laid sick in his lodge,
 -t -ga gu haytg-it gi -sga na -süül
 -3 -CN REL stand-3 DEM-CN POSS-middle
 POSS PREP S PREP
 which stood in the middle of the

-ga t'aa.
 -CN lake
 POSS
 lake.

- (79) Ada-t nii-sga gyik su -naks -ga naks
 and-3 see-CN again new-spouse-CN marry
 A PRED PREP
 And she saw the new wife whom he had married.

-t-ga.
 -3-DEM
 A
 (Boas 1912:160)

- (80) Ada al gaks wil da -txalyaa gat-got'iks-at
 and EMPH yet that with-increase PL -arrive -3
 S
 And still [the number of] those arriving who
 in hu-waat -a txa'nii ligiwaal-ga.
 REL PL-trade-CN all things -DEM
 PRED
 were trading all kinds of things increased.
 (Boas 1912:80)

In (77), the head of the relative clause, t'apxadooltga ha-na'angt 'two women', is an A in the relative clause, in waay Hatsenas 'who had found Hatsenas' and in (78), the head, nts'mwaabtga 'his lodge', is an S in the relative clause, gu haytgit gisga nasüülga t'aa 'which stood in the middle of the lake'. The head in (79) is sunaksga 'new wife' which is an O in the relative clause, nakstga 'whom he had married', and the head in (80) is -at '3' which is an A in the relative clause, in huwaata txa'nii ligiwaalga 'who were trading all kinds of things' (the -a in -at '3' is an epenthetic vowel).

While there is no distinction between an A, S or O as to what type of NP is relativized, there is a distinction

made with respect to a relative marker and whether one must be present. As is illustrated in (77) and (80), when an A is relativized, there is a relative marker in 'REL', whereas with a relativized S or O, as in (78)-(79), it is either gu 'REL', as in (78), or there is no relative marker, as in (79).⁵

The marking of person agreement and the connectives are also sensitive to whether the relativized NP is an S, O or A in the dependent relative clause. When the head is an S or O in the relative clause, there is either a prepositional connective suffixed to the S or O, as in (78) and (79), or, if the relative marker gu is present, the prepositional connective, da or ga, occurs after the relative marker. There are also examples where both prepositional connectives and the relative marker are present, as in (81). In casual speech, the prepositional connective does not occur, as in (82). In addition, when the head is an S in the relative clause, the verb of that clause is optionally suffixed with a 3rd person dependent pronoun, -t '3', as in (78) and (82). There is no such marking when the head is an O, as in (79).

- (81) ... dm -t ta'alaayu-sga ðimkdii-t -ga gu
 FUT-3 visit -CN sister -3 -CN REL
 A PRED POSS-PREP
 ...they were going to visit their sister who
 da dzag-a di -sda aamt da sganaktda.
 CN dead-CN DEM-CN good CN some time
 PREP PREP PREP POSS
 had been dead there for some time.
 (Boas 1912:162)

- (82) Ada-t nii wil -t ludam -tga naks -t -ga
 and-3 see that-3 comfort-CN spouse-3 -CN
 A A PRED POSS PRED
 And he saw that his wife was comforting his son
- ɬguɬg-m 'yuut, yawga 'wiihawtg-it.
 young-CN man PRES cry -3
 S
 who was crying.

In (81), the head of the relative clause, ɬimkdiit 'their sister', is suffixed with the prepositional connective ga and the prepositional connective da occurs after the relative marker gu as well. In (82), the head of the relative clause, ɬguɬgm 'young man', is not marked with a prepositional connective. In addition, there is no relative marker in this example.

When the head is an A in the relative clause, connectives do not occur as part of relativization. As with topicalization, the dependent pronoun -t '3' occurs with several different variations. For example, in (77), the dependent pronoun -t '3' is suffixed to the head of the relative clause, t'apxadooltga hana'angt 'two women'. In other cases, the -t is suffixed just to the relative marker, in, or just to a tense/aspect marker such as dm 'FUT', as in (83a). In casual speech the -t does not occur, as in (83b).⁶

- (83)a. Nah ɬa 'niidz-d-u 'yuuta dm -t in baa
 PAST just see -3-1SG man FUT-3 REL run
 O A A
 I just saw the man who will run the boat.
- n boot. (E)
 -CAUS boat

- b. Nah ɬa 'niidz-d-u 'yuuta dm in baa
 PAST just see -3-1SG man FUT REL run
 O A
 I just saw the man who will run the boat.
 -'n boot. (E)
 -CAUS boat

In summary, relativization, like topicalization, in Sm'algyax, is a process which has characteristics that are ergative, accusative and neither ergative or accusative. First, since all three arguments, A, S and O, can be relativized and there is no restriction as to the type of NP that can be relativized, this aspect of relativization is neither ergative or accusative. Next, the relative marker is in 'REL' with a head that is an A in the relative clause, whereas the relative marker is gu or \emptyset with a head that is an S or O in the relative clause. In this respect, relativization is ergative in Coast Tsimshian. Connectives were found to be part of the relativization process with an S or O but not with an A. In this respect, relativization is also ergative. Finally, it was shown that person agreement marking occurs with a head of a relative clause that is an S or A in the relative clause, but not with an O. This aspect of relativization, then, is accusative.

3.11 The Lack of a Passive or an Antipassive

In Sm'algyax, there are no syntactic processes which correspond to a passive or an antipassive construction. That is, following Dixon's (1979:119) definitions, there is

no passive process which "places the deep O NP in surface S function, and marks the deep A NP with an oblique case/preposition/etc. (this NP can then be deleted)." Similarly, there is no antipassive process which "places the deep A NP in surface S function, and marks the deep O NP with an oblique case/preposition/etc. (this NP can then be deleted)."

As discussed in Section 2.8.2, there is a verb-formation process in Coast Tsimshian which involves the semantic incorporation of the O into the verb. Syntactically, the number of arguments on the verb is reduced and the A becomes the S of the resulting intransitive verb. Morphologically, a suffix is added to the verb stem. This process relates lexical items such as:

- | | | | |
|--------|-------------|----------------|--------------------------------|
| (84)a. | <u>ga</u> b | | eat |
| | | <u>ga</u> 'psk | eat berries off
the tree |
| b. | beex | | tear |
| | | beexk | tear bark from
a cedar tree |

While this process might be described as an 'antipassive' rule, it is not a productive morphological process. Instead, it is a process relating a few lexical items. Because of the very small number of verbs with a corresponding 'antipassive' form and the fact that the complex stem has a more specialized meaning than the simple verb stem, it would seem that the complex verb stems should be lexically derived, as in Dunn's (1983) analysis which is pre-

sented in Section 2.8.2.

The lack of a passive or an antipassive construction in Coast Tsimshian is not too suprising when we look at the reasons for the existence and uses of passives and antipassives. For example, one of the functions of a passive, or an antipassive, is to bring the O, or the A, into S function for processses such as co-ordination, subordination, and relativization. However, in each case, as it was shown in Sections 3.7, 3.8 and 3.9, there are no restrictions on the syntactic role of the relevant NP in these types of clause linkage.

Another function of a passive, or an antipassive, is to allow for a way to avoid having to mention an A, or an O, where either this is unknown or difficult to specify, or conversely, where this is already known to the hearer. This is done in Sm'algyax by simply indicating the A or O by a third person dependent pronoun on the verb rather than as a full lexical NP. As the third person dependent pronoun does not specify gender or number it has a very general meaning. The following pairs of examples illustrate this first with an S (85), then an A with an O that is expressed (86), and finally an O with an A that is expressed (87):

- (85)a. Yagwa sa -na'axs-as n -dzi'its -n. (E)
PRES make-dress -CN POSS-grandmother-2SG
 PRED POSS
Your grandmother is dressmaking.

- b. Yagwa sa -na'axs-it.
PRES make-dress -3
S
She is dressmaking.
- (86)a. K'wa'wn-s n -dzi'its -n 'lax. (E)
drop -CN POSS-grandmother-2SG needle
PRED POSS
Your grandmother dropped the needle.
- b. K'wa'wn-t-ida 'lax.
drop -3-CN needle
A PRED
She dropped the needle.
- (87)a. Dm al gagul-u 'lax. (E)
FUT EMPH look -1SG needle
for A
I'll look for the needle.
- b. Dm al gagul-u.
FUT EMPH look -1SG
for A
I'll look for it.

In (85), the verb contains the incorporated noun, na-
'axs 'dress' and the predicative connective, as, marks ndzi-
'itsn 'your grandmother' as a proper noun S. In (85b), the
S is the general 3rd person pronoun, -t. In (86b), the A
is the general 3rd person pronoun, -t, whereas in (87b),
where the A is a 1st person dependent pronoun, the 3rd per-
son O is not expressed. These examples are taken from a
reader for primary level children which actually contains
(85b), (86b) and (87b) as part of the story. In (85b), the
first of the three lines to occur, the referent, ndzi'itsn
'your grandmother', is previously established in the story.

To summarize, it seems that Coast Tsimshian has alternative ways of dealing with the functions of a passive or

an antipassive. As Jacobsen (1979:145) has concluded for Washo, which also lacks a passive: "In short, as with any language, the parts work together like a well-oiled piece of machinery to let the speakers say whatever they want."

3.12 Summary

In Sections 3.2-3.11, I have explored syntactic ergativity in Coast Tsimshian by examining a range of syntactic constructions to determine whether they are ergative, accusative or neither ergative or accusative. In order to do this, the syntactic constructions under consideration were divided into those which are universally accusative, those which have a universal basis that is not dependent on S and A (i.e., accusative) or on S and O (i.e., ergative), and those which are language-particular as to whether they are accusative or ergative. It was also recognized that within any one syntactic operation some aspects of the process may be ergative, others may be accusative and still others may be neither ergative or accusative. A summary of the findings are given in (88):

(88) Summary of Syntactic Constructions

1. Universal Accusative Basis
 - Imperatives acc, erg
 - Jussive Complements acc, A/S/O
 - 'Want' and Similar Verbs acc, A:S
2. Universal Basis: A or O
 - Causatives A, erg
 - Reflexives O
3. Language Particular Basis
 - Coordination A/S/O
 - Subordination A/S/O
 - Topicalization A/S/O, erg, acc
 - Relativization A/S/O, erg, acc
4. Lack of a Passive or Antipassive

where A/S/O indicates no distinction between A, S and O,
and A:S indicates a distinction between A and S

With syntactic constructions that have a universal accusative basis, there are also some aspects of these constructions in Coast Tsimshian which are either ergative (i.e., with imperatives) or neither ergative or accusative (i.e., with jussive complements and 'want' and similar verbs). Of the two syntactic processes which have a universal basis that is either A or O, only causatives in Sm'algyax have an additional aspect which is ergative. All of the syntactic operations which have a language particular basis either make no distinctions between an A, S or O (i.e., are neither ergative or accusative) or have properties which belong to all three categories (i.e., ergative, accusative and neither ergative or accusative).

Notes

1. The only exception I am aware of is in (i):

(i) Baa-(n). run-2SG S Run.	(ii) Koł-sm. run-2PL PL S Run.
--------------------------------------	---

In (i) the S is optional rather than obligatory, whereas in (ii), as is the general case, the S must occur.

The optionality of the 2nd person singular S in this case may be due to the fact that the singular and plural forms of this intransitive verb are suppletive. Thus, the number of the S can be determined from the form of the verb rather than being dependent on the form of the dependent pronoun as is the case when the singular and plural forms of the verb are the same.

2. An (E) indicates that the example has been directly elicited from a native speaker rather than being from a text or observed in natural discourse.
3. It should be noted that this sentence was not directly elicited but is the second line in a repetition story that is part of the primary level reading series developed for School District No. 52 (Prince Rupert, B.C.). The two sentence frames in the story are:

Xsmasg-m ol , xsmasg-m ol , gooyu niidz-n?
 brown -CN bear brown -CN bear what see -2SG
 ADJ ADJ S
Brown bear, brown bear, what do you see?

Niidz-u masg-m ts'u'uts, ada di -t niis-d -u.
 see -1SG red -CN bird and on -3 see -TRANS-1SG.
 A ADJ its A =look at O
 part
 I see a red bird and it is looking at me.

(The underlined NPs are changed throughout the repetition story).

4. Dunn (1978b:342) claims that non-pronominal As can not be topicalized. However, I have found topicalized non-pronominal As occurring freely in texts and an example is given in (61).
5. That gu 'REL' can not be interpreted as marking only S and \emptyset as marking only O is shown by examples such as the following:

Ada-t wil aayt -gi -sga na -waa -t gu
 and-3 then call.out-DEM-CN POSS-name-3 REL
 A name PREP POSS
 And then she named the name which

nak'yinam-s nagwat-gas 'niit, Gunaxniismgyad.
 give -CN father-CN 3SG
 PRED PREP
 his father had given to him, Gunaxniismgyad.
 (Boas 1912:170)

Here, the head of the relative clause, nawaat 'his name' is an O in the relative clause, nak'yinams nagwatgas 'niit 'his father had given to him' and is marked with gu 'REL'. Thus, when an S or O is relativized it is marked with \emptyset or gu 'REL'.

6. I have not been able to find enough examples in texts of relative clauses that contain a tense/aspect marker to determine if the occurrence of the person agreement marker -t '3' is also conditioned by the tense/aspect of the sentence and by the semantic content of the A and O relative to each other as it is with topicalization.

Chapter 4: The Coast Tsimshian Problem: From a Cross-Linguistic Perspective

4.1 Introduction

In this chapter, I summarize the correlates of morphological and syntactic ergativity that were presented in detail in Chapters 2 and 3 and look at the ergativity data in Coast Tsimshian from a cross-linguistic perspective. Specifically, in Section 4.2, I discuss the degree of morphological ergativity in this language and the relation of the splits in Coast Tsimshian ergativity to the hierarchy on split ergativity proposed by Silverstein (1976). I also consider the factors conditioning the splits in morphological ergativity and suggest that they are inherently related. In Section 4.3, I discuss the degree of syntactic ergativity in Sm'algyax and compare it with other languages with varying degrees of syntactic ergativity such as Dyirbal, Yidin^y, Chukchee, and Yup'ik Eskimo. Finally, I examine the notion of subject with respect to the ergative orientation of the syntax in Coast Tsimshian.

4.2 Morphological Ergativity

In Chapter 2, I considered the correlates of ergativity at the morphological level in Sm'algyax by examining the morphological markings which indicate the function of an NP in a sentence; namely, the connective system which is

roughly analogous to case marking, the pronominal system and person and number agreement on the verb. In addition it was shown that there are three factors which condition the distribution of ergativity in this language: the tense/-aspect of the clause, the mood of the clause and the person or semantic nature of the A and O relative to each other.

With regard to ergativity in the predicative connectives, the distribution can be summarized as in (1):

(1) Ergativity in the Predicative Connectives

	<u>common noun</u>			<u>proper noun</u>		
	<u>indef.</u>	<u>pres.</u>	<u>absent</u>	<u>indef.</u>	<u>pres.</u>	<u>absent</u>
<u>full</u>						
V + S/A/O						
indicative	Ø	E	E	E(?)	E(?)	E(?)
subjunctive	Ø	E	E	E	E	E
S/A						
V + { or						
A + O						
indicative	Ø	E	E	E(?)	E(?)	E(?)
subjunctive	Ø	T	3	3	T(?)	T(?)
<u>reduced</u>						
A = -a/-as		0			A	
A = -da/-dat		E			3	

where E = S/O:A Ø = S/O/A T = S:O/A
A = S/A:O 3 = S:O:A

Note that a question mark appears in those cases where an example of one of the forms has not been found. However, a value has been determined by assuming that the missing form can be filled in on the basis of analogy with the appropriate forms that do occur.

As is shown in (1), ergativity occurs in the full set of connectives in all but the indefinite common noun forms and the subjunctive forms when the O NP is not immediately

following the verb. In these non-ergative cases, however, the forms are not accusative. They either make no distinction, mark the S differently from the A and O, or mark all three NPs differently. In the reduced set of connectives, ergativity occurs in the common noun forms when the A is marked with -da. An accusative system occurs in the proper noun forms when the A is marked with -as. In the other two cases, when a common noun A is marked with -a and a proper noun A with -dit, the forms are neither ergative or accusative: they either make no distinction or mark all three NPs differently.

In the pronominal system, two types of pronouns were examined: independent pronouns which function as lexical NPs and dependent pronouns which are clitics on the verb. The independent pronouns are neither ergative or accusative as they have the same form irrespective of whether they function as an A, S or O within a clause. With the dependent pronouns, three different series of pronouns were discussed: the subjective, objective and definite objective. The distribution of these three series was summarized as in (2):

(2) Dependent Pronouns in Clauses

	<u>subjunctive</u>	<u>indicative</u>
S		definite objective
}	objective	
O		objective/definite objective
A	subjective	subjective/objective

The nature of this distribution with respect to ergativity was represented as in (3):

(3) Ergativity in the Dependent Pronouns

Subjunctive

S/O:A = ergative

<u>Indicative</u>					
	A \ O	1		2	
		PL	SG	PL	SG
1 {	PL				
	SG		3		E
2 {	PL				
	SG		E		-
3					

where E = S/O:A T = S:O/A 3 = S:O:A


It was concluded that ergativity occurs in the dependent pronouns in all but the indicative when the A is 1st person and the O is 1st person or 2nd person plural and when the A is a 1st or 2nd person and the O is a 3rd person. In these non-ergative cases, however, the forms are not accusative. They either mark all three arguments differently or the S is marked differently from the A and O.

The last type of morphological marking, which cross-references the S, A or O on the verb, is person and number agreement. In Sm'algyax, person agreement was shown to only occur when the A is an independent pronoun or a lexical NP. It is an ergative pattern as only the A is marked rather than the A and S or just the O. Number agreement is also ergative in that the verb agrees in number with the S and O but not the A.

In considering the degree of morphological ergativity in Coast Tsimshian, then, we see that this language is very highly ergative and the only trace of an accusative distribution is with proper nouns in the reduced set of predicative connectives. Thus, Coast Tsimshian fits the universal that while there are languages that are consistently accusative in their morphology, no language is consistently ergative across every possible constituent of an NP and in every construction type (Dixon 1979:63).

The splits in morphological ergativity across languages have been found to follow to a hierarchy proposed by Silverstein (1976), which can be represented as in (4):

(4) Hierarchy of Split Ergativity

1st pers. <u>pronouns</u>	2nd pers. <u>pronouns</u>	3rd pers. <u>pronouns</u>	proper <u>nouns</u>	common nouns <u>human anim. inanim.</u>
				
more likely to have accusative marking			more likely to have ergative marking	

While there has been much discussion as to the explanations for such tendencies (e.g., Wierzbicka 1981, 1982 and Silverstein 1976, 1981), the distribution of morphological ergativity across the majority of such languages supports this hierarchy.

However, the split in ergativity in Coast Tsimshian does not. Comparing (1) and (3) with (4), and ignoring instances of 3-way (S:O:A), \emptyset (S/O/A), or T (S:O/A) marking, we see that accusative marking occurs with proper

interaction of the semantic nature of NPs and the tense/aspect of the clause with person agreement could be schematized as in (6):

(6) Person Agreement across Tense/Aspect

	<u>nah</u>	<u>nah ɬa</u>	<u>∅</u>	<u>dm</u>	<u>ɬa dm</u>	<u>ɬa</u>	<u>yagwa</u>	
Person Agreement	← occurs if O > A →				← optional in casual speech →			← required →

The arrangement of tense/aspect particles in (6) reflects a continuum from nah 'past tense' and nah ɬa 'just finished', which have a perfective aspect; to ∅ 'nonfuture tense', dm 'future tense', ɬa 'just beginning' and ɬa dm 'about to', which have either no aspectual distinction or an imperfective aspect; to yagwa 'present tense', with a dynamic aspect.

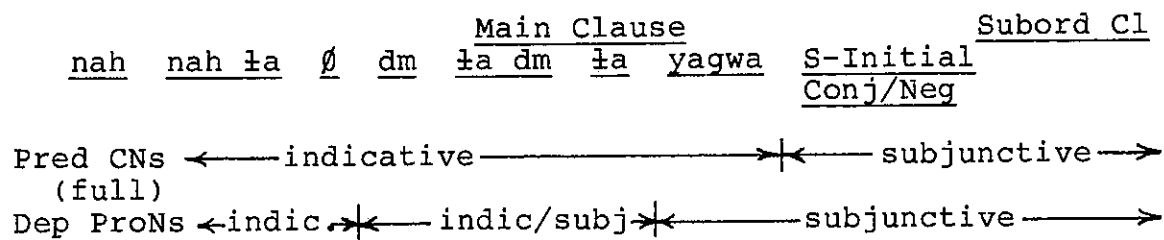
Similarly, it was shown that the full set of predicative connectives and the dependent pronouns both distinguish the indicative and subjunctive moods and that for the dependent pronouns the distribution of these two moods is further conditioned by the tense/aspect of the sentence. This was represented as in (7):

(7) Dependent Pronouns across Tense/Aspect

	<u>nah</u>	<u>nah ɬa</u>	<u>∅</u>	<u>dm</u>	<u>ɬa</u>	<u>ɬa dm</u>	<u>yagwa</u>	
S	← indicative →				← subjunctive →			
A > O:								
O = 1st/2nd	← indicative = subjunctive →							
O = 3rd	← indicative →				← subjunctive →			
O = NP	← indicative →				← indic/subjn →		← subjn →	
A = O	← indicative = subjunctive →							
O > A	← indicative →				← indic/subjn →		← subjunctive →	

In addition it was shown that both the full set of predicative connectives and the dependent pronouns occur in the subjunctive mood in main clauses with sentence-initial conjunctions or negative markers, as well as in subordinate clauses. This full distribution of the indicative and subjunctive moods was diagrammed as in (8):

(8) Interaction of Tense/Aspect and Mood



In the literature on ergativity (e.g. Dixon 1979:97), Coast Tsimshian has been cited as an example of a language with a split in ergativity between main and subordinate clauses. This would be a grammaticality conditioned split rather than a semantically motivated split such as one conditioned by tense/aspect. However, as is summarized in (8), the split in ergativity marked by the indicative and subjunctive moods in Coast Tsimshian does not exactly line up with the grammatical division between main and subordinate clauses. Instead, the distribution of these two moods was argued in Section 2.7.3.2 to have a coherent semantic basis. The subjunctive mood occurs in main clauses in two types of clauses, those in which the tense locus is defined by the narrative or discourse rather than by the speech

moment, and negative clauses and clauses where the tense/aspect marker expresses a degree of non-completeness. The indicative mood occurs in the remaining types of main clauses: clauses in which the tense locus is the speech moment, and non-negative clauses in which the event is either complete or no commitment to completeness/non-completeness is being asserted.

It remains to consider whether there is a coherent basis relating the three factors which condition the morphological markings in Coast Tsimshian. As Givon (1984:153) suggests, "...there is an interesting way in which all the splits [in ergativity across languages] seem to be determined by the cluster of scalar properties that comprise transitivity." In Hopper and Thompson's (1980) well-reasoned description of transitivity, they list the following scalar properties¹ which are relevant to the Sm'algyax data:

(9) <u>Property</u>	<u>High</u> <u>Transitivity</u>	←————→ <u>Low</u> <u>Transitivity</u>
Aspect	perfective	imperfective
Mood	realis	irrealis
A and O	$A \geq O$	$A < O$

where $A \geq O$ indicates A outranks or is equal to O
and $A < O$ indicates O outranks A

In addition, Givon (1984:153) suggests the following scalar property of tense: past > future > present, with past corresponding to high transitivity and ergative marking, and present corresponding to low transitivity and

accusative marking. That is, in languages with split ergativity, if a clause is marked with past tense, then it is more likely to receive ergative marking. On the other hand if a clause is marked with present tense, it is more likely to receive accusative marking. The connection with transitivity follows from the observation that a past event is more likely to be completed (i.e. perfective) whereas a future or presently on-going event is more likely to not be completed (i.e. imperfective).

With respect to mood, Hopper and Thompson (1980:277) state that:

The somewhat vague linguistic parameter known as 'realis/irrealis' is a cover term for the opposition between indicative and such non-assertive forms as subjunctive, optative, hypothetical, imaginary, conditional etc. As a reduced assertion of the finite reality of the state or event referred to by the clause, irrealis forms could be expected to occur in less Transitive environments.

While the contrast of indicative and subjunctive moods in Coast Tsimshian does not precisely match the usual use of these terms, recall that it was argued in Section 2.7.3.2 that the subjunctive mood in Sm'algyax occurs in 'non-asserted' clauses. That is, the distribution of indicative and subjunctive moods was shown in Section 2.7.3.2 to have a coherent semantic basis, namely that of asserted/non-asserted. Thus, in Coast Tsimshian, the indicative mood correlates with Hopper and Thompson's predictions of high

transitivity and the realis mood, while the subjunctive mood correlates with low transitivity and the irrealis or non-asserted mood.

When the scalar properties of transitivity in (9) are compared to the distribution of the three conditioning factors of morphological ergativity in Coast Tsimshian as represented in (6), (7) and (8), we see that there is a direct correlation. For example, in (7) and (8), the high transitive properties of perfective aspect, past tense and indicative mood cluster together at the left end of the continuum while the low transitive properties of imperfective aspect, present tense and subjunctive mood cluster at the right end of the continuum. In (6), however, we see that person agreement occurs in the high transitive end of the tense/aspect continuum only if the O outranks the A, i.e., in those cases where the relative ranking of the A and O has low transitivity. That is, person agreement is only marked in the high transitive end of the continuum when the relative ranking of the A and O has low transitivity rather than when it has high transitivity. This is in contrast to (7) and (8) where all of the high transitive properties cluster together at the left end of the continuum.

In conclusion, it appears, then, that the three conditioning factors that operate in Sm'algyax are related in that they are transitive properties.

4.3 Syntactic Ergativity

In Chapter 3, I examined syntactic ergativity in Sm'al-gyax by investigating a range of syntactic constructions to determine whether they are ergative, accusative or neither ergative or accusative. In order to do this, the syntactic constructions under consideration were divided into those which are universally accusative, those which have a universal basis that is not dependent on S and A (i.e., accusative) or on S and O (i.e., ergative), and those which are language-particular as to whether they are accusative or ergative. Within each syntactic process it was also recognized that some aspects of the operation may be ergative, others may be accusative and still others may be neither ergative or accusative. A summary of the results are repeated in (10):

(10) Summary of Syntactic Constructions

- | | |
|-------------------------------------|-----------------|
| 1. Universal Accusative Basis | |
| Imperatives | acc, erg |
| Jussive Complements | acc, A/S/O |
| 'Want' and Similar Verbs | acc, A:S |
| 2. Universal Basis: A or O | |
| Causatives | A, erg |
| Reflexives | O |
| 3. Language Particular Basis | |
| Coordination | A/S/O |
| Subordination | A/S/O |
| Topicalization | A/S/O, erg, acc |
| Relativization | A/S/O, erg, acc |
| 4. Lack of a Passive or Antipassive | |

where A/S/O indicates no distinction between A, S and O,
A:S indicates a distinction between A and S,
acc indicates a distinction between A or S and O,
and erg indicates a distinction between S or O and A.

As this summary indicates, with syntactic constructions that have a universal accusative basis, there are also some ergative and neither ergative or accusative aspects of these constructions in Coast Tsimshian. For example, imperatives have an ergative as well as an accusative aspect while jussive complements and complements of 'want' and similar verbs have an aspect which is neither ergative or accusative as well as an accusative aspect. Of the two syntactic processes which have a universal basis that is either A or O, only causatives have an additional aspect which is ergative. All of the syntactic operations which have a language particular basis either make no distinctions between an A, S or O and are, thus, neither ergative or accusative, or have properties which belong to all three categories, namely, ergative, accusative and neither ergative or accusative.

The splits between accusative, ergative and neither ergative or accusative aspects of the various syntactic constructions in Coast Tsimshian are in sharp contrast to the syntactic ergativity of a language such as Dyirbal (Dixon 1972). Morphologically, Dyirbal has a split ergative/accusative system. And syntactically, while the only operations which are ergative are the language-particular syntactic operations (i.e., coordination, subordination, topicalization and relativization), each of these operations is ergative in all aspects of the process. In addition, there

is an antipassive construction which serves to bring the A into S function for these processes.

In comparison, then, the Coast Tsimshian data suggest that while the syntax of Coast Tsimshian is clearly not "highly" ergative, there are a number of respects in which it is still definitely ergative. As such, along the syntactic ergative/accusative continuum, Coast Tsimshian lies somewhere between a language like Walmatjari, which Dixon (1979:125-6) describes as having a split ergative/accusative morphology, but an entirely accusative syntax, and a language like Dyirbal, in which the syntactic constructions with a language particular basis are completely ergative.

Three other languages with morphological ergativity which lie between the two ends of the syntactic ergative/-accusative continuum are Yidin^Y, Chukchee and Yup'ik Eskimo. In Yidin^Y subordinate clauses (Dixon 1977), for example, any NP coreferential with an NP in the main clause must be in an S or O function in that subordinate clause. Thus subordination is an ergative syntactic process in Yidin^Y. However, coordination in this language has some aspects which are ergative and some which are accusative. There appear to be two main kinds of coordination in Yidin^Y. In each case the two (or more) clauses that are joined together involve a common NP. With non-pronominal NPs, the common NP must be in S or O function in each clause, whereas with pronominal NPs, the common NP must be

in S or A function in each clause. In each case the common NP will normally only occur in the first clause. In contrast, when a transitive sentence with a pronominal A and nominal O is coordinated with an intransitive sentence, the resulting sentence is ambiguous as to whether the omitted S of the second sentence is coreferential with the A or O of the first clause. Thus coordination in Yidin^y is ergative for nouns and accusative for pronouns.

In Chukchee (Comrie 1979), the only vestige of ergative syntax is in relativization. In this language, relative clauses are formed using various participial verbal forms (analogous to the English the woman knitting the sweater as compared with the woman who is knitting the sweater). Logically, the head noun of this construction can function as the S, A or O within the non-finite clause. However, the negative participle can be used in Chukchee to relativize on S or O, but not on A. To relativize on A with the negative participle, the non-finite verb must be marked with a detransitivizing prefix which in effect changes the A in a transitive clause into an S in an intransitive clause. Thus, the syntax of the negative participle in Chukchee works on an ergative basis.

Finally, in Yup'ik Eskimo (Payne 1982), coordination and relativization operate on an ergative basis. For example, with coordination, sentences can be constructed such that when a transitive and an intransitive clause occur

together in a coordinate construction the S of the intransitive clause can logically be interpreted as coreferential with either the A or O of the transitive clause. However, in Yup'ik Eskimo the zero-pronominalized single argument of the intransitive clause can only be interpreted as being coreferential with the O of the transitive clause in these types of sentences. For example in a Yup'ik equivalent of a sentence like Tom kissed Doris and then coughed, the S of cough can only be coreferential with the O, Doris, of the first clause, and not with the A, Tom. With relativization in Yup'ik Eskimo, three different nominalizing strategies are used. These three strategies, which each involve a different verbal suffix, nominalize on either S or O, only on S, or only on O, but in none of the strategies on A. Thus, relativization operates on an ergative basis in this language.

To summarize, then, Yidin^Y, Chukchee and Yup'ik Eskimo, like Coast Tsimshian, all contain syntactic operations of which some or all aspects are ergative rather than accusative. That is, some of the syntactic processes in these languages have an ergative rather than an accusative orientation.

Turning to the definition of subject, syntactically ergative languages such as Coast Tsimshian, Dyirbal, Yidin^Y, Chukchee and Yup'ik Eskimo clearly pose a problem for the identification of subject with a single noun phrase

since various syntactic operations in these languages do not identify the same noun phrase as subject across the different operations. To handle this problem, two suggestions have been made for identifying the subject in syntactically ergative languages. The first, proposed by Dixon (1979), involves the distinction between syntactic operations which have a universal accusative basis and those which have a language particular basis. Those with a universal accusative basis operate at the deep structure level where they follow the universal category of 'subject':

'Subject' is defined as a universal deep-structure category, involving functions A and S. Languages cannot be characterized as either 'accusative' or 'ergative' in deep structure.

The operation of optional singular transformations on deep structures yields shallow structures. It is at this level that generalized transformations operate, forming coordinate and subordinate constructions. These rules may treat (derived) S and A in the same way, or they may treat (derived) S and O in the same way; we refer to S/A and S/O pivots respectively. If a language has an S/O pivot, it can be said to have 'ergative' syntax. (Dixon 1979:132)

This proposal works well for a language like Dyirbal which has an S/A pivot and for languages like Yidin^y, Chukchee and Yup'ik Eskimo which can be classified as having an S/A pivot for some syntactic operation and an S/O pivot for others. In all of these languages the syntactic operations which have a universal accusative basis do indeed operate in an accusative manner. However, in Coast Tsimshian, even

imperatives have an ergative aspect. Thus, this proposal does not work well for a language like Coast Tsimshian, where some of the syntactic operations with a universal accusative basis also have an ergative aspect.

The second proposal involves the functional approach to clause structure taken by Schachter (1976, 1977) for Philippine languages, which divides subject traits into role and reference related properties. In the Philippine languages, the actor noun phrase expresses the role related properties, as it has the central role in the clause from the perspective of the speaker, whereas the topic noun phrase expresses the reference related properties, as it has prominence due to its presupposed referentiality with respect to other nominals in the sentence.² For Yup'ik Eskimo, Payne (1982) shows that for five subject properties the division of these properties into role and reference properties corresponds to the division of subject properties in Yup'ik Eskimo between those which identify the S/A as subject and those which identify the S/O as subject. For example, the role-related subject properties of left-most NP in an S, imperative addressee and pivot for elliptical infinitival complements³ all identify the S/A as subject in Yup'ik Eskimo, just as they identify the actor as subject in Philippine languages. Correspondingly, the reference-related subject properties of pivot across coordinate constructions and relativizability identify the S/O in

Yup'ik Eskimo and the topic in the Philippine languages as the subject.

In Coast Tsimshian, however, for each of a number of the role and reference related properties, the particular syntactic process does not identify a single noun phrase as the subject. For example, with imperatives the addressee is the S/A, but with respect to deletion only the A can be deleted. Thus, one aspect of the construction is role related while another aspect is reference related. The problem is further compounded in syntactic operations like relativization where some aspects are ergative, some are accusative and some treat all three noun phrases, S, A and O, alike.

In conclusion, while the notion of subject applies to the vast majority of the world's languages which have a fully accusative syntax or even to syntactically ergative languages like Dyirbal and Yup'ik Eskimo, none of the proposed definitions can account for the Coast Tsimshian facts. Rather it seems that the notion of subject does not play an important part in explaining the syntactic properties of this language.

4.4 Summary

In this study, I have examined in detail the morphological and syntactic dimensions of ergativity in Coast Tsimshian. In this chapter the major findings of Chapters

2 and 3 are summarized and then considered from a crosslinguistic perspective. This was done in two parts. First, at the morphological level, I considered the degree of morphological ergativity in Sm'algyax, the relation of the splits from an absolutely ergative system to the hierarchy on split ergativity proposed by Silverstein (1976), and whether the factors conditioning the splits in ergativity have a unitary basis. Then I considered the degree of syntactic ergativity in Coast Tsimshian, how this compared with other languages that have varying degrees of syntactic ergativity, and the implications for a cross-linguistic notion of subject.

At the morphological level I showed that this language is very highly, but not thoroughly, ergative. This fits with the universal that while there are languages which are consistently accusative in their morphology, there are no languages which are consistently ergative. In contrast, it was shown that the splits in ergativity in Sm'algyax do not support the hierarchy of split ergativity proposed by Silverstein (1976). Finally, I suggested that the factors conditioning the splits in ergativity in this language are related through their coding of transitivity.

With regard to ergativity at the syntactic level, I concluded that Coast Tsimshian is not 'highly' ergative, although there are a number of respects in which various syntactic processes are still definitely ergative. When

compared to other languages with syntactic ergativity, it seems that Sm'algyax is similar to Yidin^y, Chukchee and Yup'ik Eskimo, which all have language particular syntactic operations of which some or all aspects are ergative rather than accusative. This is in contrast to a language like Dyirbal, in which the syntactic constructions with a language particular basis are completely ergative. In terms of a cross-linguistic definition of subject, it was argued that while the definitions proposed by Schachter (1976, 1977) and Dixon (1979) apply to languages with accusative syntax and even to syntactically ergative languages like Dyirbal and Yup'ik Eskimo, they do not account for the Coast Tsimshian facts. From this I concluded that the notion of subject does not play an important role in the syntax of Coast Tsimshian.

Notes

1. These are scalar properties in that their values range over a continuum or scale rather than having simply a plus or minus value.
2. As Schachter (1976:494) summarizes, the term "topic", in the usage of Philippinists, applies to the constituent noun phrase which is marked either by the use of a topic pronoun form or by a pronominal topic marker and is semantically always interpreted as definite. There is also a case-marking affix on the verb, which indicates the case role of the topic noun phrase. For the term "actor", Schachter (1976:498) states that:

While I know of no really satisfactory generalization about the semantic characteristics associated with the actor... I find that the following characterization (taken from Benton 1971:167) will, if interpreted charitably enough, cover most cases: "the entity to which the action of the verb is attributed." (The requisite charitable interpretation allows "action" to serve as a cover term for actions, happenings, and conditions in general.)

3. The elliptical infinitival complements occur in constructions with finite main verbs and express actions which are perceived as being part of the action of the main verb (e.g. Randy left, kissing his children). What is relevant to the discussion here, is that coreferentiality between a participant of an elliptical infinitival complement and a participant of the matrix clause is controlled by the A and S rather than the S and O.

Epilogue: The Coast Tsimshian
Speech Community Since 1830

1. Introduction

In this epilogue I wish to address the broader sociolinguistic issues that face the Coast Tsimshian people as a speech community. I do not feel that a language today can be analyzed independently of the people who speak that language. The tie of a people to their language is very strong, as the graduating students from University of Victoria's Native Language Teacher Training Program in Prince Rupert expressed in their graduation feast theme: Our Language is Our Strength.

Sm'algyax is a vital expression of the people who speak it; it codifies and reflects the culture, spirit, history and philosophy of its speakers. Presently, all speakers of the Coast Tsimshian language are also fluent in English, and the fact that they continue to use Sm'algyax, despite enormous historical and sociological pressures to assimilate, reflects the importance of the language to its speakers. In the last few years there has been an increasing effort at the community level towards promoting cultural awareness and language use. The good intentions, dedication and spirit that have motivated these efforts underline the desire of the Coast Tsimshian people to ensure that Sm'algyax does not die, for with it, they feel, may die a

culture. This epilogue will attempt to chronicle the struggle for the survival of Sm'algyax since the period of first white contact.

2. A Brief Demographic History

This section examines various aspects of the history of the Coast Tsimshian people and their movements as it pertains to the loss of Sm'algyax. First, the tribes and their territories at the time of first continuous white contact (around 1830) are presented. Next, the two major types of demographic movements are examined: movements of whole tribes and movements of individuals and families to white settlements and canneries. The information in this section will serve as the basis for the discussion in section 3 concerning the role of education and various other factors in the decline of Sm'algyax.

At the time of first continuous white contact (around 1830) there were fourteen Coast Tsimshian tribes (see fig. 5):

Canyon Tribes:	Gitse l as Gitsumgalum
Lower Skeena Tribes:	Ginakangiik Git'andoo Gisp'axlo'ots Gilutsau Gitlan Gitwilgyots Git'tsiis Gitandoyks Gidzaxlaa l
Outer Coastal Tribes:	Gitkxala

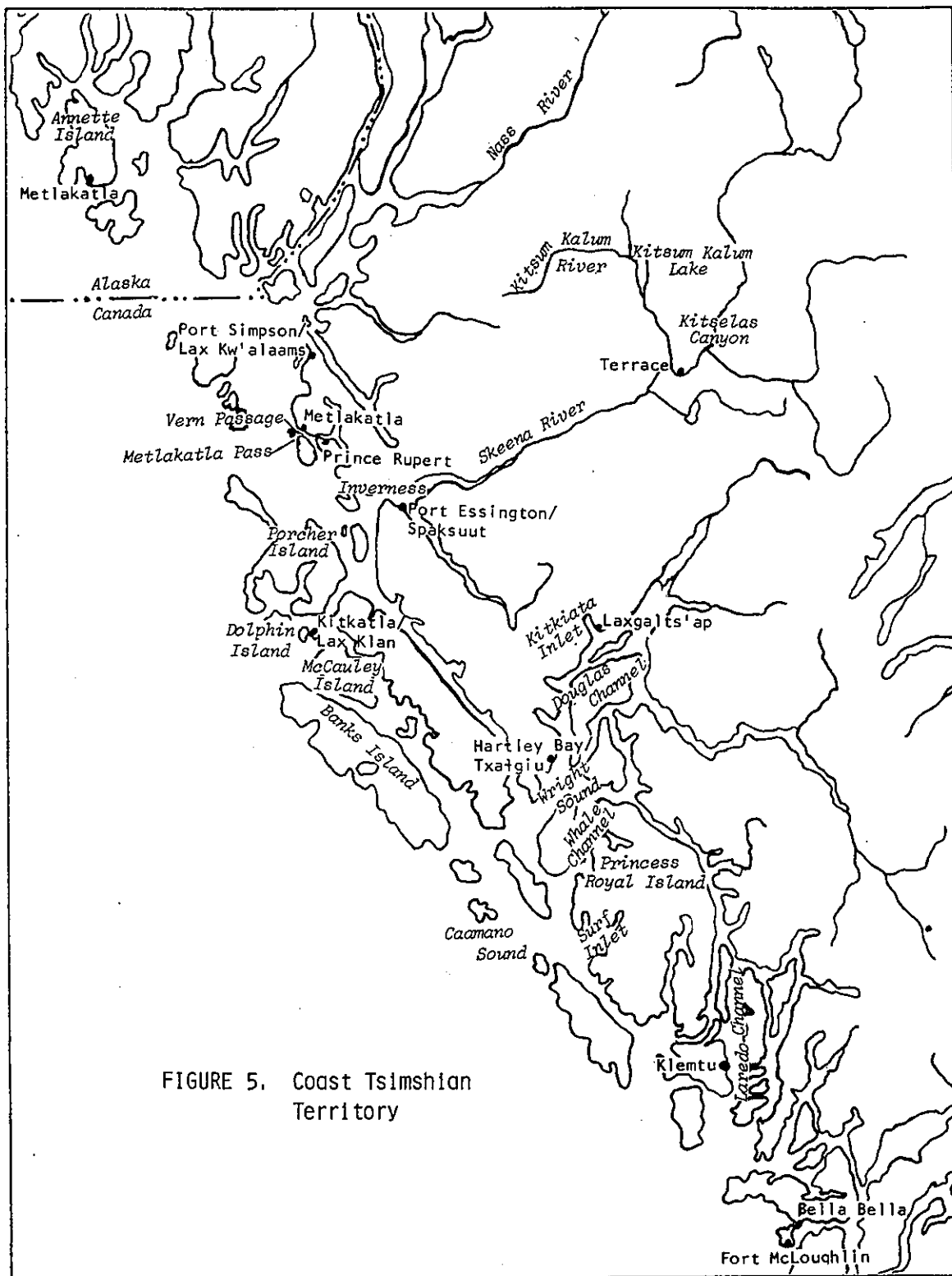


FIGURE 5. Coast Tsimshian Territory

Gitka'ata
Gitisdzu

Boas (1916: 482) also records the names of four other lower Skeena tribes: Gidwulksaba'a, Gispaxawl, Wuts'analuk and Gidgadu. However, these tribes appear to have become extinct before the beginning of sustained white contact.

The Canyon Tsimshian occupied territories near the contemporary town of Terrace. The Gitselas had two winter village sites, each built to face the other across the narrow canyon on the upper Skeena River. The winter village of the Gitsumgalum was on the Kitsum Kalum River not far below Kitsum Kalum Lake.

The winter village sites of the lower Skeena River nine tribes were located through Metlakatla Pass and Vern Passage near the contemporary town of Prince Rupert. During the olachon run in early spring the tribes moved to the mouth of the Nass River where each tribe held fishing rights for this small smelt-like fish. Each tribe also owned sites on the way from their winter sites to the Nass, one of the most important stopping places being located on Tsimshian peninsula where the contemporary town of Port Simpson is located. During the salmon fishing season each of the tribes moved to separate villages on the Skeena River and the adjacent coast.

The Outer Coastal Tsimshian all occupied coastal territories south of the Skeena River. The winter village of

the Gitkxala, Lax Klan, was on Dolphin Island, and they possessed territorial sites on Porcher, Dolphin, McCauley and Banks Islands. The Gitka'ata's winter village was Laxgal-ts'ap on Kitkiata Inlet and they occupied territory from Douglas Channel, Whale Channel, Wright Sound and Lewis Pass to Caamano Sound. The Gitisdzu occupied the most southern territory of the Coast Tsimshian tribes. Their boundary with the Gitka'ata was at Surf Inlet on Princess Royal Island and their primary winter village was on Laredo Channel.

The earliest European contact was with the maritime fur traders who were active along the coast from the 1780's to the 1830's. However, it was not until 1831, with the establishment of Fort Simpson as a trading post on the Nass River by the Hudson's Bay Company, that Europeans were to make a permanent residence among the Tsimshian. In 1833 Fort Simpson was moved due to the extremely cold winter winds and shallow anchorage. The new fort was erected at one of the camping sites of the lower nine Skeena Tribes - Lax Kw'alaams on Tsimshian Peninsula. A few years later the name was changed from Fort Simpson to Port Simpson to avoid mail and supply delivery problems with Fort Simpson in the Northwest Territories. It was not long after the post was moved before Tsimshian groups began to construct winter houses nearby. The advantages of living close to the fort were manifold: not only were trade goods constantly

available, but the Tsimshian were also in a position to intercept other groups who came to trade furs, thus gaining a middleman's profit with little effort. For 1857, Garfield (1966:7) lists Port Simpson as having a native population of 2,300. It appears that all of the lower Skeena River tribes abandoned their winter villages and moved to Port Simpson. In addition, many of the other Coast Tsimshian tribes were represented on an individual and a family basis at Port Simpson. However, these tribes did not possess territorial sites around the fort and they did not abandon their traditional village sites.

In 1833 a second Hudson's Bay Fort was established near Coast Tsimshian territory. Fort McLoughlin was located about 5 km west of present day Bella Bella, but at the time was located adjacent to the main Bella Bella village whose inhabitants moved to the present town site in 1897. While the Gitisdzu and Gitkxala were recorded as being frequent visitors to the fort (Tolmie 1963), there were no tribal movements by the Coast Tsimshian to this trading post. Fort McLoughlin was abandoned in 1843 and subsequently burned by the Bella Bella to obtain the metal in its construction (Walbran 1971: 331).

In 1857 the first missionary, William Duncan, arrived to establish a Church Missionary Society mission at Port Simpson for the Tsimshian nation. Five years of experience at the trading post convinced Duncan that his dual mission

of Christianity and civilization could not succeed in such an environment. Thus in May 1862, a new village was created at one of the former winter village sites along Metlakatla Pass. The settlement, Metlakatla, grew rapidly, and with its many industries, large church, neat houses and clean-clad inhabitants became widely known as a model of missionary endeavor. In this very controlled environment, the Coast Tsimshians were introduced to a period of rapid cultural change.

The settlement at Metlakatla included, by the fall of 1862, the Gitlan tribe of Port Simpson and the Gitka'ata tribe as well as individuals and families from most of the other Tsimshian tribes. The Gitka'ata tribe, however, was the only tribe to abandon its village to move to Metlakatla. In 1879 a schism in the Anglican Church led to the establishment of a new diocese of Caledonia and the arrival of a bishop, William Ridley, at Metlakatla. Problems over theological practices arose and Duncan, along with the majority of the Tsimshians, attempted to remove the Bishop from the Metlakatla reserve. As a means to this end the Tsimshians raised the question of their aboriginal land title. The Dominion and Provincial Governments would not consider the land question and were prepared to use force to settle the disturbances. To avoid this, Duncan obtained a grant of land in Alaska on Annette Island, where in 1887, accompanied by 600 Tsimshians, he established (New)

Metlakatla. At the time of the movement to Alaska, the main force of the Gitka'ata tribe moved back to its traditional territories and established the present village of Hartley Bay at a formerly occupied site called Txałgiu.

In 1871 the town of Port Essington was established at a site called Spaksuut where the nine lower Skeena River tribes gathered in the fall for a period of ceremonials before moving to their winter village sites. Robert Cunningham, who took out the land title on the site, encouraged the Tsimshian to settle permanently at Port Essington. The settlement was laid out on two arms of a right angle and the portion extending along the Skeena River was the portion laid aside for the Indian village. Most of the Gitsumgalum tribe, along with individuals from many of the other tribes, moved to this site.

The first fish cannery was established on the north coast in 1876 at Inverness, a slough at the mouth of the Skeena River. The next fifty years saw numerous canneries established along the coast. The main working force until 1886 were native women and boys. In that year a new labor force became available, namely Chinese left over from railway construction gangs. The native population, however, continued to represent a significant portion of the cannery work force. With the exception of the cannery in Klemtu, the movements to the canneries were on an individual or family basis. However, when the cannery was established in

1927 at Klemtu the Gitisdzu established their permanent village there along with a Heiltsuk Kwakiutl tribe.

Since the establishment of towns such as Terrace and Prince Rupert in the early 1900's there has been a gradual tendency for the peoples of all the Coast Tsimshian tribes to move to the towns. This last phase of population movement involves individuals and families rather than whole village groups.

3. A Historical Perspective on the Use of Coast Tsimshian

3.1 Non-Educational Factors in the Decline of Coast Tsimshian

This section will focus on various non-educational factors which have led to the decline of fluency in Sm'algyax. In discussing these factors it will prove helpful to use a classification of cultural change established by Linton (1963): non-directed and directed acculturation. The first type occurs when in a cultural contact situation a culture changes and adapts to another culture, but without any explicit policy or direction from any of the groups of people involved. In directed acculturation, on the other hand, there is an overt policy effected, generally by a factor in the dominant culture, as to how and in what direction the change is to take place.

The fur trade, both maritime and land-based, is an example of non-directed acculturation. As Fisher (1977:47-8)

summarizes:

Clearly the fur trade brought change to Indian society...New wealth was injected into Indian culture but not in a way that was socially disruptive, so the cultures were altered but not destroyed. Fur traders occasionally contemplated modifications of Indian customs, but they lacked the power and, ultimately, the will to effect such changes. The nature of their relationship with the Indians precluded such interference. During the fur trading period Europeans and Indians were part of a mutually beneficial economic symbiosis, in which neither gained from the hostility of the other.

...On the other hand, it could well be that the co-operative relationship between the races during the fur-trading period was poor preparation for the Indians when they had to cope with the new and disruptive elements that came with the settlement frontier.

With respect to Sm'algyax usage, the fur trade had limited impact, as Chinook jargon was used as the means of conducting trade. While no systematic attempt was made to teach English or French to the Coast Tsimshians around Port Simpson, several lexical items in the Port Simpson dialect can be traced to this contact period (e.g. latab 'table' << French la table) instead of ha'litxoox 'table').

The general tendency for individuals and families to move to the canneries and towns also resulted in non-directed acculturation with a loss in Coast Tsimshian fluency. While many of these movements were seasonal rather than permanent, the pressures toward English usage and against Sm'algyax usage were much more apparent during these periods

of increased contact. There was a great deal of racial discrimination not only in the town work forces but also in the canneries where natives were ranked below the Chinese and Japanese workers. The message was clear: a command of English would aid in securing a better job, whereas fluency in a native language was only a detriment.

The negative attitudes that arose concerning Sm'algyax usage and its subsequent decline can be firmly linked to the directed acculturation policies of missionaries and government Indian agents such as William Duncan and James Douglas. The aims of the missionaries were at one with the general policy of the government in the sense that the missionaries demanded total cultural capitulation from the native populace. As Fisher (1977:124-5) summarizes:

The missionaries brought a new set of religious beliefs to the Indian, beliefs which were to cleanse them "from the awful superstitions in which they were now sunk". But they also assumed that the "improvement" of the heathen was an essential part of their becoming Christian, and for the European of the nineteenth century "improvement" meant westernization.

Louis Shotridge (1919:56), a Tlingit from Alaska, visited Port Simpson in 1918 and stated the following:

It was the method of most of the early missionaries that if the savage man was to be civilized at all, he must be made to forget as early as possible, his native ideas as well as his language. This is the mistake that the missionaries of today have to transform, and I think that it might take just as much effort to teach the modernized Indian to

be original as it did to make him abandon his originality.

The attitude of the superiority of English to Coast Tsimshian is very clear in Duncan's missionary work. To the Church Missionary Society, he commented that "They (the Coast Tsimshian) are brought so much into contact with the whites that they naturally desire to acquire their learning and language" (Usher 1975:94). Duncan translated some of the gospels and hymns and composed some songs, prayers and moral homilies in Sm'algyax. This, however, was almost the full extent of his translation work; neither the prayerbook nor the Bible was ever entirely translated into Sm'algyax. As Usher (1974:94) summarizes:

In 1880 he justified his position to the society by arguing that "the Indians are but few in number and in a few years I believe will become an English speaking community". Yet Duncan had done very little translation after 1867, although the destiny of the Indians to lose their own language was not clearly evident.

In addition to contributing to the general decline in Sm'algyax, Duncan also directly contributed to the loss of Sgüüxs (Southern Tsimshian). Originally Sgüüxs was spoken by the Gitka'ata and Gitisdzu. However, when the Gitka'ata moved to Metlakatla they shifted to speaking English and Sm'algyax. Similarly, the Gitisdzu shifted to predominantly Sm'algyax and English usage through the increased contact with other Coast Tsimshians and non-natives through the canneries, missionaries, towns and the eventual move to Klemtu

with the Heiltsuk Kwakiutl. Presently, Sgüüxs is spoken by only 5 elderly members of one family in Klemtu and, hopefully, will be able to be adequately recorded and studied before it becomes extinct.

The final major directed acculturative agent to be discussed here was the government official. Although the history of Indian administration in the Tsimshian area has not yet been investigated, it is still possible to indicate the general policy to outline how enforced acculturation was begun formally and informally as the government officials and Indian agents exercised guardianship over their native wards. For example, James Douglas, a long time Hudson's Bay Company benefactor and first governor of the province, saw the only hope for survival of the native peoples in terms of their becoming "red-skinned Europeans". He wanted to see the Indians treated as much as possible on a level of equality with the whites, with the eventual objective being assimilation to the European society.

In 1871 when British Columbia became a province of Canada, the federal Indian agent continued the policy of acculturation that had already been formulated. In the Annual Report of 1871, for example, attention was directed toward policies to "lead the Indian people by degrees to mingle with the White race in the ordinary avocations of life" (DIA 1871). Clearly, the native culture and language were viewed as having no place in the drive towards total

acculturation to the dominant society.

3.2 The Historical Role of Coast Tsimshian in Education

Schools have assumed a role of major importance in the directed acculturation of the Tsimshian for several generations. In the early history of education in this region the missionaries took charge of the schooling. The missionaries used education as a means of evangelism as well as a means of striving toward total acculturation. This was congruent with the goals of the dominant European society, in general, which expected education to lead each new generation of native people across social and economic bridges to a state of identity with the majority culture. Many native parents wanted their children to have a greater mastery of the new techniques and, thus, supported the schools in the belief that they would give this mastery. However, since the schools had been instituted and operated, by and large, with the aims of Europeanizing and assimilating the native child, they directly contributed to the loss of the native language and, more generally, created a dilemma for the native family and child, who had to make a choice between cultures.

The first school in the Coast Tsimshian region was begun by the missionary, William Duncan. When he first arrived at Port Simpson in 1857, he began classes inside the fort for the resident half-native children, and in the following year began classes outside the fort for the Coast

Tsimshian children. As Usher (1974:48) concludes:

The school was the most important and most direct agent of acculturation at Fort Simpson. It was successful in teaching the elements of reading and writing to several dozen Tsimshian.

At Port Simpson and later at Metlakatla, reading, writing and scriptural knowledge formed the basis of the curriculum. Although Duncan spoke Sm'algyax fluently, most of the teaching was done in English, and while the Coast Tsimshians were taught to read Sm'algyax, the principle emphasis was on literacy in English.

To further his aim of producing moral European-type Christian homes, Duncan established a boarding house, the first of the residential schools in the area, which were one of the most forceful and successful forms of acculturation, and one that considerably extended the personal influence and control of the missionary.

Most of the schools in the other Coast Tsimshian villages were also initially run by missionaries. In Kitkatla, for example, a school was begun by the Anglican Church around the beginning of the 20th century and was formally taken over by the Department of Indian Affairs (DIA) in 1912. While there has been a school in Kitkatla for a relatively long period of time, until about twenty years ago, there were few children who did not spend some time in a residential school. Initially, Kitkatla children of all ages went to school in Alert Bay on Vancouver Island. About

thirty years ago students in grades 8 - 12 began going to Edmonton, Alberta, to high school. Also in this more recent period, some children lived in Salvation Army residential homes in Prince Rupert and attended the provincial schools.

The main reason that the majority of children spent some time in residential school centered around their parents' desire for an education to master the skills that would enable the students to compete in the dominant culture. In the village the livelihood of most native families required the seasonal or irregular pursuit of employment or sustenance away from their winter homes. A family had the choice of going together or separating, some remaining behind. Attendance figures of children at the Kitkatla school, given in school records which are not included here, reflect, among other things, the movement away from reserve to cannery, to fishing station, or to town. Generally, the September enrollment was small, October and November showed an increase, the winter months showed a high level of attendance, and then in the spring months the attendance again dropped. Thus, in order for their children to have ten full months of schooling, many parents sent their children away to residential schools and boarding homes. The federal government and the provincial education authorities attempted to enforce attendance in the village day school and residential schools only so far as the

facilities were available and the students were healthy and presented few behavioral problems.

Standard accounts of the educational history of this area and in British Columbia, in general, make little reference to the suppression and loss of the native languages. However, this is not surprising, since, as noted above, the schools were viewed by the churches, government and the European settler society in general as a primary means for acculturating native peoples. Levine and Cooper (1976:51-2) have gathered data on the Government view of Native languages:

The case is stated as plainly as possible by Hayter Reed, Deputy Superintendent of Indian Affairs, in 1893:

Experience has proved that the industrial and boarding schools are productive of the best results in Indian Education. At the ordinary day school the children are under the influence of their teacher for only a short time each day and after school hours they merge again with the life of the reserve...but in the boarding or industrial schools the pupils are removed for a long period from the leadings of this uncivilized life and receive constant care and attention. It is therefore in the interest of the Indians that those institutions should be kept in an efficient state as it is in their success that the solution of the Indian problem lies. (DIA Annual Report 1893, xviii)

The same note is sounded again two years later, this time with explicit reference to the problem of Native languages:

If it were possible to gather in all the Indian children and retain them for a certain period, there would be produced a generation of English-speaking Indians... (DIA Annual Report 1895, xxiii)

It is during this year that the Department of Indian Affairs announces as a matter of policy, the suppression of the indigenous languages of Canada. Speaking of the Canadian Indian generally, the Deputy Superintendent notes that:

...he should be brought to compete with his fellow whites, but in order that this may be done effectually he must be taught the English language. So long as he keeps his native tongue, so long will he remain a community apart...with this end in view the children in all the industrial and boarding schools are taught in the English language exclusively. (DIA Annual Report 1895, xxii-xxiii; our emphasis)

This passage presents as nakedly and straightforwardly as possible the Government view of the matter, and it is clear that the schools were seen as a means of implementing the policy.

The residential schools were a particularly forceful means for effecting the shift from Sm'algyax to English for the following reasons: knowledge was passed on to Tsimshian children through the rich oral traditions of their people and by observation and experience. When the children were sent to residential schools, they were cut off from traditional learning for ten out of twelve months of the year, and not only were they forbidden to speak their own language, but they were severely punished if they did. In

addition, the children were generally removed from their Coast Tsimshian language environment at a critical age for language development. During this critical period, the children had not mastered the rules of Sm'algyax and when they were immersed so intensively in English, the latter was incorporated in a far more pervasive way than if English had been learned subsequently. When these linguistic facts are combined with the negative social linguistic attitudes toward their native language, it is not surprising that the shift from Sm'algyax to English was so rapid and thorough.

3.3 Factors in Establishing a Sm'algyax Language Program

From the discussion in the previous sections concerning the decline of Sm'algyax fluency due to demographic movements, the attitudes of missionaries and government officials, and the resulting educational policies, the following questions must be raised: Why is there now a Sm'algyax Language Program in the Coast Tsimshian village schools? What caused the reversal in educational policy? In this section three reasons will be presented and discussed: first, the frustration and struggle by the Coast Tsimshian people for survival and identity; second, the decline of missionary control of education and changes in government policy; and, third, the renaissance of native art and culture which began in the early 1960's. Needless to say, these three areas of change did not happen independently,

but are all interrelated.

The history of the Coast Tsimshians and, more generally, British Columbia's native peoples' struggle for survival and identity has not been and cannot be written adequately. The historical evidence shows that the struggle became increasingly political in character as the native people became more knowledgeable of and skilled in pressure group functions. Increasingly, the native people have gained more input into the agencies and decision-making processes which affect them.

In 1931 the Native Brotherhood of British Columbia (NB) was organized, and from the beginning education has been one of its major concerns. Initially, the approach to the problem took the form of criticism of the existing system, particularly the residential schools, at which children were kept for long periods. As Drucker (1958:142-3) notes:

The Brotherhood leaders realized they were treading on dangerous ground, and tried to make clear that they did not mean to criticize the churches, or the missionaries, but rather, the Government, which they contended did not fulfill its responsibility of supporting the schools adequately...With the revitalization and tremendous expansion of Government services to the Indians following World War II, great emphasis was placed on improving Indian Schools...In British Columbia (and throughout the Dominion), equaling Provincial public school standards was set as the target of the Indian school system: teachers' qualification requirements were set at the same level and curricula were

revised to raise the standards of instruction.

It is not clear how many of these trends in native education were simply part of postwar policies of expanded services by the DIA and how much credit can be claimed by the NB. During the prewar period the DIA was realizing that the anticipated assimilation to European ways had not proceeded as had been originally imagined. Many changes had taken place in most native cultures, but economic and cultural differences were still very strong. As far as education was concerned, the centrality of religion in the content and direction of Euro-Canadian education was declining by the middle of the twentieth century. This was a reasonable time, then, to question the churches' role in the administration of native education. Also, native education was not being remarkably successful either from the administrative or the native perspective. By the end of World War II, then, the native situation and government opinion had changed considerably from what they had been in the late nineteenth and early twentieth centuries.

From the standpoint of native language survival, however, this period saw little actual change. While the overall quality of education was slowly raised, Coast Tsimshian children were still severely punished for speaking Sm'algyax and were still often spending long periods of time in residential schools in Alert Bay and Edmonton.

The 1960's, though, did mark the beginning of a renaissance period in Northwest Coast art. At this time there was a marked change in the attitude of Euro-Canadian society toward Northwest Coast artwork and carving. With this acceptance and interest in the art came a renewal of interest among the native groups to produce quality artists. The next phase seems to have been an interest in reviving the dances and in forming native dance groups. As discussed in detail below, from there the commitment has spread to renewal in native languages and cultures and in using the education system as a means to help achieve these goals.

In 1966 and 1967, a two-volume, federally initiated study on Indian affairs was published (Hawthorn 1967). Generally known as the Hawthorn Report after its editor, it mainly favoured the move toward integration but accused the federal government of being colonial in its attitudes and policies. It called for more authority to be given to the bands in the administration of all facets of native life. Concerning education, its main recommendation was that the policy of integration be continued, but with some provisos. Most of the provisos suggested that Indian needs in the areas of curriculum, language, kindergartens, textbooks, educational testing, health, housing and the like must be given special consideration despite the policy of equality in education.

By 1967 a new policy had slowly been presenting itself

to the DIA: if native people themselves took over some or all of the decision making on native matters, then the government could eventually be relieved of a good deal of administration as well as the responsibility for the quality and outcome of the decisions made. This new possibility represented a subtle shift from the policy of trying to treat native people exactly the same as other citizens.

In 1968 and 1969, the DIA Minister, Jean Chrétien, held meetings with native groups in order to prepare a new federal Indian policy. The resulting paper, the "Statement of the Government of Canada on Indian Policy" (DIAND 1969), now usually known as the White Paper, took an unexpected view and contended that the fact that Indians receive special treatment, different from other citizens, is discriminatory, isolationist and separatist.

The native reaction to the White Paper was almost unanimously negative. The National Indian Brotherhood (NIB) gathered position papers from the various provincial native associations, including the NB, and in 1972 published what has become the guide book for Indian education policy, Indian Control of Indian Education (NIB 1972). In 1973 the DIA Minister gave official recognition to Indian Control, "approving its proposals and committing the Department of Indian Affairs and Northern Development to implementing them" (NIB 1972:iii). As Burnaby (1980:53) concludes:

In effect this means that the Education Division (of the DIA) is cautiously

carrying on as it was before the White Paper was presented, but it is very sensitive to native opinion on both the national and local levels, and it is more willing than before to transfer administrative authority to band councils where asked.

The educational goals for native children as summarized in Indian Control (1972:3) are:

1. to reinforce their Indian identity,
2. to provide the training necessary for making a good living in modern society.

One aspect of the preservation of native identity is seen as native language instruction:

Language is the outward expression of an accumulation of learning and experience shared by a group of people over centuries of development. It is not simply a vocal symbol; it is a dynamic force which shapes the way a man looks at the world, his thinking about the world and his philosophy of life. Knowing his maternal language helps a man to know himself; being proud of his language helps a man to be proud of himself.

The Indian people are expressing growing concern that the native languages are being lost; that the younger generations can no longer speak or understand their mother tongue. If the Indian identity is to be preserved, steps must be taken to reverse this trend.

While much can be done by parents in the home and by the community on the reserve to foster facility in speaking and understanding, there is a great need for formal instruction in the language. (NIB 1972:14-5)

In the "Summary of the Indian Position on Education" in Indian Control it is concluded concerning language and

culture that:

Indian children must have the opportunity to learn their language, history and culture in the classroom. Curricula will have to be revised in federal and provincial schools to recognize the contributions which the Indian people have made to Canadian history and life. (NIB 1972:28)

As part of the move toward native control of education, the band councils of the Coast Tsimshian villages of Hartley Bay, Kitkatla and Lax Kw'alaams decided in 1975 to move their schools from federal control to provincial control under School District No. 52 (Prince Rupert). At this time there was a desire not only for their children to achieve their full potential in the provincial schools, but also a desire to recognize and strengthen the special culture and language background of their children. In 1977, the Sm'algyax Language Program was begun in the school in Hartley Bay and in January 1979 was added to the schools in Lax Kw'alaams and Kitkatla.

The Metlakatla Band Council had decided in 1960 to send their small number of children (generally around 30) by a daily ferry to Prince Rupert rather than trying to maintain a school on the reserve. In the spring of 1980, a voluntary evening Sm'algyax Language Program was begun.

The British Columbia Ministry of Education in 1979, formally recognized that for a number of years Native people and local school districts had been working towards

meeting the special learning and cultural needs of the native child in the public schools. In its policy statement on native education it is stated that:

The Ministry supports the preservation of native languages through the use of the public schools to teach these languages and, where a native language is the language of dominance for a significant group of native children in a school or school district, the Ministry supports the development and implementation of bilingual-bicultural programs, thereby allowing a student to become proficient in two languages and two cultures.

The Ministry supports the active recruitment of native Indian language and culture specialists, teacher-aides and home-school liaison workers to work in school districts, and also supports the continuous upgrading of these positions through training programs to a recognized status whenever possible. (British Columbia Ministry of Education 1972:2-3)

Clearly, there has been a fundamental change over the past 40 years in the attitudes and policies towards the survival of native languages. These changes have been not only among government officials and much of the general public, but also among the native people themselves.

4. The School and Language Revival

4.1 Program Description

The goal of the Sm'algyax Language Program in Metlakatla and the village schools in Hartley Bay, Kitkatla and Lax Kw'alaams is that children will enter the English speaking

classroom psychologically better prepared to deal with their Indianness, that adults will see the use of Sm'algyax as a positive goal, and that community members will become involved in the formal education of their children as resource people for the schools.

The objectives of the program can be summarized as follows:

direct objective - promote fluency in Sm'algyax.

indirect objectives - increase knowledge of traditional culture.
- positive development of individual and community self-esteem.

It is the aim of the villages that Sm'algyax again becomes an instrument of communication at home, between friends, in inter-family relationships, and in traditional cultural contexts. It is hoped that as many community members as possible will achieve complete fluency and that those for whom this is not realistic will gain limited fluency in all or some social contexts. A parallel aim is to increase awareness of the knowledge of the Tsimshian cultural heritage. The development of community and self-esteem is anticipated to follow from the increased language use and cultural awareness.

The instructional goal is to provide 100 minutes per week of class time using Sm'algyax as the medium of instruction and employing second language methodology.

Staff training has been provided through the Univer-

sity of Victoria's Native Indian Language Diploma Program. All of the Sm'algyax Language Teachers completed this program when it was offered off-campus in Prince Rupert. The program is a series of nine courses - eight in linguistics and one in education - which provide a background for preparing materials and teaching a native language. Upon completion of the program the native language teachers were hired by the province as regular teachers under the B.C. Teachers Federation. However, ongoing training and upgrading remains a critical need, as the students the native language teachers teach are taught by teachers with four or five years of training for all of their other courses.

Curriculum development also remains an ongoing need. From January 1981 - June 1984 there was a half-time position for curriculum development. However, since that time there has not been any major commitment to Sm'algyax curriculum development. Since the program is offered in Nursery through Grade 10 the need to provide a more complete curricula for effective teaching by the native language teachers is critical.

4.2 The Role of the School

The discussion in this section will focus on what role the school can and should play in the revival of the Coast Tsimshian language. The first question to be asked is why the Coast Tsimshian people asked the school to take a central part in the revival and retention of Sm'algyax. There

are several possible answers, each of which has a part in the final consideration. In the Coast Tsimshian communities, the school provides facilities and a means for launching movements the people are interested in (for example, health and fitness programs). Also, given their background of experience with education, many of the people have come to believe that the school is the place where certain things are learned (for example: cooking and basic industrial education skills). But, perhaps more importantly, the community feels that a native language program makes the school more relevant to and more reflective of the communities' perceived needs. Also many people in the communities feel that the school is a major factor in the shift toward English and that, as a result, it should now take a central part in teaching Sm'algyax.

The following questions also need to be asked: Can the school program do what the Coast Tsimshian people are asking for? And can the language program influence Coast Tsimshian children to learn and use Sm'algyax? Unfortunately, the language program is so recent that it is hard to tell what effect there will be on the language patterns of the village children. While informal program evaluation reports focus on the progress of students and the satisfaction of staff, parents and community, they do not provide a real measure of language use.

However, the success for the school program is direct-

ly related to the support the Sm'algyax program receives within the villages. The students need to be aided by encouragement on all sides: the home, their peers, the village elders and the school. There is a cyclical relationship between the methods used to teach Sm'algyax and the villages' awareness of and participation in the program. The more successful the methods, the more the communities tend to involve themselves in the Sm'algyax program and the more Sm'algyax is used.

Even more importantly, though, the students must be exposed to and required to use Sm'algyax extensively in the home and general community setting; a half-hour a day program without intensive reinforcement and use will not alone revive the language. A language retention program can accomplish no more than what the communities as a whole want and are willing to actively support.

At worst, the Sm'algyax program will at least slow down the loss and eventual death of the language. However, if the program can make some improvements in the positive development of individual and community self-esteem then it should be supported for that reason (as long as the communities realize that this is the realistic limited outcome of the program). While a native language program will not solve all of a society's ills, it can perhaps be a valuable step in the direction of positive self-identity for the students, and provide a positive link for the adults with

the formal education of their children.

References

- Allen, W. Sidney.
1964. Transitivity and possession. *Language* 40.337-43.
- Anderson, Stephen R.
1976. On the notion of subject in ergative languages. *Subject and topic*, ed. by Charles N. Li, 1-23. New York: Academic Press.
- Anonymous.
n.d.a. English-Tsimshian vocabulary. MS. B.C. Provincial Archives, Victoria.

n.d.b. English-Tsimshian vocabulary. MS. B.C. Provincial Archives, Victoria.

1879. Acts 18:9-26:6. MS. Alaska Native Language Center Archives, Fairbanks.
- Arctander, John W.
1909. *The apostle of Alaska: The story of William Duncan of Metlakatla*. New York: Fleming H. Revell.
- Barbeau, Marius.
1917. Review of Tsimshian mythology, by Franz Boas. *American Anthropologist* 19.548-63.
- Bedard, Kathy, and Sm'algyax Language Teachers.
1986. Gwün ol gwa [The three bears]; Gwün kaba duus [The three kittens]; Egu ol [Little bear]. Prince Rupert, B.C.: School District No. 52.
- Benton, Richard.
1971. *Pangasinan reference grammar*. Honolulu: University of Hawaii Press.
- Beynon, William.
1915-1956. Materials collected for Marius Barbeau. MS. Canadian Centre for Folk Studies. Canadian Museum of Civilization, Ottawa.

1932-1939. Tsimshian texts collected for Franz Boas. MS. Special Collections. Columbia University Archives.

1933. Text from Henry Tate. MS. Melville Jacobs Collection. University of Washington Archives.

1955. Ethnical and geographical study of the Tsemisyaen Nation. MS. Philip Drucker Papers. National Anthropological Archives. Smithsonian Institution.

Boas, Franz.

1886. Two texts. Die Sprache der Tsimshian-Indianer in Northwest-America. ed. by Count A. F. Graf von der Schulenberg, 183-5, 188-91. Braunschweig: Richard Sattler.

1888. Die Tsimshian. Zeitschrift für Ethnologie 20.231-47.

1889. Tsimshian. Report of the Committee for Investigating and Publishing Reports on the Physical Characters, Languages, and Industrial and Social Conditions of the North-Western Tribes of the Dominion of Canada. Report of the meeting of the British Association for the Advancement of Science. Reprinted, 1974. Northwest Anthropological Research Notes, University of Idaho.

1891. Vocabularies of the Tlingit, Haida, and Tsimshian languages. Proceedings of the American Philosophical Society 24.173-208.

1895. Indianische Sagen von der Nord-Pazifische Küste Amerikas. Sonder Abdruck aus den Verhandlungen der Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte 1891-1895, 23-27. Berlin: A. Asher und Co.

1899. Review of Die Sprache der Tsimshian-Indianer, by Dr. A. F. Graf von der Schulenberg. American Anthropologist 1.369-73.

1908. Eine Sonnensage der Tsimshian. Zeitschrift für Ethnologie 40.776-979.

1911. Tsimshian. Handbook of American Indian languages, ed. by Franz Boas, 283-422. Washington: Government Printing Office. Facsimile Reproduction, 1981. Washington: Shorey Book Store.

1912. Tsimshian texts, new series. Publications of the American Ethnological Society 3.67-284. Leyden: E. J. Brill.

1916. Tsimshian mythology. 31st Annual Report of the United States Bureau of American Ethnology, 29-1037. Washington, D.C.: Government Printing Office. Reprinted, 1970. New York: Johnson Reprints. [Page references cited are to the 1970 edition].

1939. Ethnographic and folkloristic texts of the Tsimshian. MS. American Philosophical Society.

- Booth, Arnold, and Alfred Eaton.
1974. Boy on the moon. MS. Alaska Native Language Center Archives, Fairbanks.
- Booth, Arnold, Mary Guthrie, Richard Dauenhauer, and Nora Dauenhauer. 1974. Beginning Tsimshian. MS. Alaska Native Language Center Archives, Fairbanks.
- British Columbia Ministry of Education.
1979. Policy statement on Indian education. Victoria: Ministry of Education.
- Burnaby, Barbara.
1980. Languages and their role in educating Native children. Toronto: The Ontario Institute for Studies in Education.
- Bybee, Joan L.
1985. Morphology: a study of the relation between meaning and form. (Typological Studies in Language Series, 9.) Amsterdam: John Benjamins.
- Chung, Sandra, and Allan Timberlake.
1985. Tense, aspect and mood. Language typology and syntactic description, vol.3, ed. by Tim Shopen, 202-58. Cambridge: Cambridge University Press.
- Collison, William Henry.
1875. Hymns: Lead kindly light and Just as I am, in the Haida language. MS. Ayer Collection Haida. Newberry Library, Chicago. [Actually in Tsimshian, not Haida.]
- Comrie, Bernard.
1973. The ergative: Variation on a theme. *Lingua* 32.239-53.

1978. Ergativity. *Syntactic typology*, ed. by Winfréd P. Lehmann, 329-94. Austin: University of Texas Press.

1979. Degrees of ergativity: some Chukchee evidence. *Ergativity*, ed. by Frans Plank, 219-62. New York: Academic Press.
- Cooreman, A., B. Fox, and Talmy Givón.
1984. The discourse definition of ergativity. *Studies in Language* 8.1-34.
- Cove, John J.
1985. A detailed inventory of the Barbeau Northwest Coast files. (National Museum of Man, Mercury Series, Canadian Centre for Folk Culture Studies, Paper No.

54.) Ottawa: National Museums of Canada.

Crosby, Jessie.

1897. A synopsis of the Tsimshian language. MS. Bureau of American Ethnology. National Anthropological Archives. Smithsonian Institution.

Davidson, George.

1867. Tsimshian vocabulary recorded at Buceleugh's Sound, Fort Simpson, August 6, 1867. (United States Coast Survey Report, 1867.) MS. Bureau of American Ethnology. National Anthropological Archives. Smithsonian Institution.

Department of Indian Affairs.

1871. Annual report. Ottawa: Department of Indian Affairs.

Department of Indian Affairs and Northern Development.

1969. Statement of the Government of Canada on Indian policy. Ottawa: Department of Indian Affairs and Northern Development.

Dixon, R. M. W.

1972. The Dyirbal language of North Queensland. Cambridge: Cambridge University Press.

1977. A grammar of Yidiny. Cambridge: Cambridge University Press.

1979. Ergativity. Language 55.59-138.

Dorsey, George Amos.

1897. The geography of the Tsimshian Indians. American Antiquarian and Oriental Journal 19.276-82.

Drucker, Philip.

1958. The Native brotherhoods: Modern intertribal organizations on the Northwest Coast. (Bureau of American Ethnology, Bulletin 168.) Washington, D.C.: Government Printing Office.

Duncan, William.

1859-1896. Religious materials. MS. William Duncan Papers, Notebook 23. National Archives of Canada, Ottawa.

1880. Church manual, Metlakatla. MS. B. C. Provincial Archives, Victoria.

1885 Nhalgyashkh shimaugitkh lachabgh. [Bible passages in Tsimshian.] MS. Ayer Collection Tsimshian. Newberry

Library, Chicago.

Dunn, John Asher.

1969a. Old migrations and new dialects among the Coast Tsimshian. Paper presented at the Northwest Anthropological Conference, Victoria, B.C.

1969b. Coast Tsimshian demography and linguistic prehistory. Paper presented at the American Philosophical Society. Ms. American Philosophical Society Library.

1970. Coast Tsimshian phonology. Ph.D. diss. Department of Anthropology, University of New Mexico.

1972a. The syntactic dissolution of Coast Tsimshian. Paper presented at the Northwest Anthropological Association, Portland, Oregon.

1972b. The collapse of modality and pronominal systems in contemporary Coast Tsimshian. Working Papers for the 7th International Conference on Salish and Neighboring Languages, Bellingham, Washington.

1974. Preverbal position in Coast Tsimshian. International Journal of American Linguistics 40.10-14.

1976. Tsimshian internal relations reconsidered (part 1). Paper presented at Northwest Studies Conference, Victoria, B.C.

1978a. A practical dictionary of the Coast Tsimshian language. (National Museum of Man, Mercury Series, Canadian Ethnology Service Paper no. 42.) Ottawa: National Museums of Canada.

1978b. Coast Tsimshian relativization. Working Papers for the 13th International Conference on Salish and Neighboring Languages.

1978c. Coast Tsimshian reduplication. Paper presented at the 77th Annual Meeting of the American Anthropological Association, Los Angeles.

1979a. Tsimshian internal relations reconsidered: Southern Tsimshian. The Victoria Conference on Northwestern Languages (Heritage Record, no. 4.), ed. by Barbara S. Efrat, 62-82. Victoria: British Columbia Provincial Museum.

1979b. Tsimshian connectives. International Journal of American Linguistics 45.131-40.

- 1979c. Inter-ethnic generation skewing: Tsimshian, Tlingit, Haida. Paper presented at the 43rd International Congress of Americanists, Vancouver, B.C.
- 1979d. Pronominal concord in Coast Tsimshian. *International Journal of American Linguistics* 45.224-31.
- 1979e. Coast Tsimshian non-basal suffixes. Paper presented at the 78th Annual Meeting of the American Anthropological Association, Cincinnati.
- 1979f. A reference grammar for the Coast Tsimshian language. (National Museum of Man, Mercury Series, Canadian Ethnology Service Paper no. 55.) Ottawa: National Museums of Canada.
- 1979g. Notes on Tsimshian reduplication. Working Papers for the 14th International Conference on Salish and Neighboring Languages, Bellingham, Washington.
- 1980a. Tsimshian grandchildren: Redistributive mechanisms in personal property inheritance. *Papers in Anthropology* 20.13-32.
- 1980b. Coast Tsimshian reduplicative plurals. Working Papers for the 15th International Conference on Salish and Neighboring Languages, Vancouver, B.C.
- 1980c. Tsimshian coalescence, effacement and unbonding. Paper presented at the 79th Annual Meeting of the American Anthropological Association.
1981. Reduplication in Coast and Southern Tsimshian. Paper read at University of Kansas Linguistics Department Seminar.
1983. Coast Tsimshian non-basal suffixes. *Anthropological Linguistics* 25.1-18.
1986. Southern Tsimshian extrasyllabic initial stops. Working Papers for the 21st International Conference on Salish and Neighboring Languages, Seattle.
- Dunn, John, and Lucienne Dunn.
1972. An equivalence cycle for Kitkatla kin-status terms. *Anthropological Linguistics* 14.240-54.
- Dunn, John, and Rick A. Hays.
1981. Gamma bonding and contraction in Tsimshian uvular syllables. Working Papers for the 16th International Conference on Salish and Neighboring Languages, Missoula, Montana.

1983. Tsimshian uvular syllables. *International Journal of American Linguistics* 49.46-63.
- Durlach, Theresa Mayer.
1928. The Tsimshian relationship system. *The Relationship Systems of the Tlingit, Haida, and Tsimshian*, 116-69. Publication of the American Ethnological Society no. 11.
- Eastman, Carol A.
1982. Review of a practical dictionary of the Coast Tsimshian language by John Dunn. *Language* 58.733-4.
- Faltz, Leonard M.
1985. *Reflexivization: A study in universal syntax.* (Outstanding Dissertations in Linguistics Series.) New York: Garland Publishers.
- Fisher, Robin.
1977. *Contact and conflict: Indian-European relations in British Columbia, 1774-1890.* Vancouver: University of British Columbia Press.
- Garfield, Viola.
1928. Tsimshian fieldnotes. Garfield Collection, Box 7. University of Washington Archives.

1932. Tsimshian fieldnotes. Garfield Collection, Box 7. University of Washington Archives.

1934. Tsimshian fieldnotes. Garfield Collection, Boxes 8 and 10. University of Washington Archives.

1966. *The Tsimshian Indians and their arts.* Seattle: Univeristy of Washington Press.
- Gerdtz, Donna.
1983. A surreptitious person/animacy hierarchy in Hal-komelem Salish. Paper read at the 22nd Conference on American Indian Languages, Chicago.
- Gibbs, George.
n.d. Copy of wordlist. MS. Bureau of American Ethnology. National Anthropological Archives. Smithsonian Institution.

1860. Notes on the Northern Tribes visited in 1854. Report to the Smithsonian Institution. MS. Bureau of American Ethnology. National Anthropological Archives. Smithsonian Institution.

1877. Notes on the use of numerals among the T'sim Si-an'. Tribes of the Extreme Northwest, ed. by W. H. Dall, 155-6. (Contributions to North American Ethnology, no. 1.) Washington: Government Printing Office.
- Gibbs, George and W. H. Dall
1877. Vocabularies. Tribes of the Extreme Northwest, ed. by W. H. Dall, 143-53. (Contributions to North American Ethnology, no. 1.) Washington: Government Printing Office.
- Givón, Talmy.
1984. Syntax: A functional-typological introduction, vol. 1. Amsterdam: John Benjamins.
- Green, F. S.
1829. Report of an exploring tour on the Northwest Coast of North America (to Jeremiah Evarts). Houghton Collection. Harvard University Library.
- Grumet, Robert Steven.
1979. Native Americans of the Northwest Coast. (The Newberry Library Center for the History of the American Indian Bibliographical Series.) Bloomington: Indiana University Press.
- Guthrie, Mary.
1979. Let's learn language (Tsimshian). Booklets 1 - 10. Anchorage: National Bilingual Materials Development Center.
- Guthrie, Mary, Arnold Booth, and Louis Fawcett.
1981. Wineeya [Food]; Animals; Family Activities. Anchorage: National Bilingual Materials Development Center.
- Halpin, Marjorie Myers.
1978. William Beynon, ethnographer. American Indian Intellectuals, ed. by Margot Liberty, 140-56. (Proceedings of the American Ethnological Society for 1976.) St. Paul: West Publishing Company.
- Hawthorn, H.
1967. A survey of the contemporary Indians of Canada: Economic, political and educational needs and policies, vol. 2. Ottawa: Indian Affairs Branch.
- Hayward, Russell.
1979. The alphabet. Ms.

1980. Tsimshian stories. vol. 1. Metlakatla, Alaska: Metlakatla Indian Corporation.

1981. Tsimshian calendar. Metlakatla, Alaska: Metlakatla Indian Corporation.
1982. Tsimshian stories. vol. 2. Metlakatla, Alaska: Metlakatla Indian Corporation.
- 1983a. Tsimshian stories. vol. 3. Metlakatla, Alaska: Metlakatla Indian Corporation.
- 1983b. Tsimshian stories. vol. 4. Metlakatla, Alaska: Metlakatla Indian Corporation.
- 1983c. Tsimshian stories. vol. 5. Metlakatla, Alaska: Metlakatla Indian Corporation.
- Hewitt, J. N. B.
1896. Examination of [Charles] Hill-Tout's verbal comparisons, 1896. MS. National Anthropological Archives. Smithsonian Institution.
- Hibben, and Carswell.
1862. 'Tshimshean. Dictionary of Indian tongues, 3-10. Victoria, B.C.: Hibben and Carswell. Original, Ayer Collection Tsimshian. Newberry Library, Chicago. 2nd. ed. 1865. reset, 8-14.
- Hopper, Paul, and Sandra Thompson.
1980. Transitivity in grammar and discourse. Language 56.251-99.
- Hudson, Harold.
n.d. Sope, a Tsimshian story. Anchorage, Alaska: National Bilingual Materials Development Center.
- Hymes, Dell.
1957. Some Penutian elements and the Penutian hypothesis. Southwestern Journal of Anthropology 13.69-87. •

1964. Evidence for Penutian in lexical sets with initial *c- and *s-. International Journal of American Linguistics 30.213-42.
- I.G. [full name unknown]
1939. Guide to Benyon [sic] Tsimshian manuscripts. Rare Book and Manuscript Library. Columbia University.
- Jackendoff, Ray.
1975. Morphological and semantic regularities in the lexicon. Language 51.639-71.
- Jacobs, Melville.
1934. Tsimshian fieldnotes. Garfield Collection, Box

- 10, notebook 10. University of Washington Archives.
- Jacobsen, Jr., W. H.
1979. Why does Washo lack a passive? Ergativity, ed. by Frans Plank, 145-60. New York: Academic Press.
- Janvrin, Alice J.
1903. Snapshots from the North Pacific. London: Church Missionary Society.
- Jelinek, Eloise.
1986. The ergativity hypothesis and the argument hierarchy in Nishga. Working Papers for the International Conference on Salish and Neighboring Languages, Seattle.
- Jelinek, Eloise, and Richard Demers.
1981. The agent hierarchy in Coast Salish. Working Papers of the 16th International Conference on Salish and Neighboring Languages, Missoula, Montana.

1983. An agent hierarchy and voice in some Coast Salish languages. International Journal of American Linguistics 49.167-85.
- Keenan, Edward L.
1984. Semantic correlates of the ergative/absolutive distinction. Linguistics 22.197-223.
- Kinkade, M. Dale.
1984. Some agent hierarchies in Upper Chehalis. Working Papers of the 19th International Conference on Salish and Neighboring Languages, Victoria, B.C.
- Kirkby, Archdeacon.
1865. Hymns by Archdeacon Kirkby. MS. William Duncan Papers. National Archives of Canada, Ottawa.
- Krauss, Michael E., and Mary Jane McGary.
1980. Alaska Native languages: A bibliographical catalogue, part 1: Indian languages. (Alaska Native Language Centre Research Papers, no. 3.) Fairbanks, Alaska: University of Alaska.
- La Grasserie, Raoul de.
1902. Cinq langues de la Colombie Britannique, Haida, Tsimshian, Kwagiutl, Nootka, et Tlinkit: Grammaires, vocabulaires, textes traduits et analyses. Paris: J. Maisonneuve. Reprinted, Kraus Reprint, 1968.
- Leer, Jeff.
1975a. Tsimshian vocabulary. MS. Alaska Native Lang-

uage Center Archives, Fairbanks.

1975b. Report on orthographical issues in Metlakatla Tsimshian. MS. Alaska Native Language Center Archives, Fairbanks.

1976. Tsimshian fieldnotes. MS. Alaska Native Language Center Archives, Fairbanks.

Levine, Robert, and Freda Cooper.

1976. The suppression of B.C. languages: Filling in the gaps in the documentary record. Sound Heritage 4.43-75.

Linton, Ralph.

1963. Acculturation in seven American Indian tribes. Gloucester, Mass.: Peter Smith.

Mather, Flora, Conrad Mather, and Jeff Leer.

1977. Tsimshian lessons. MS. Alaska Native Language Center Archives, Fairbanks.

Maud, Ralph.

1982. A guide to B.C. Indian myth and legend. Vancouver: Talonbooks.

Miller, Jay.

1977. Klemtu fieldnotes. MS. Jacobs Fund Research Collection. University of Washington Library.

Mithun, Marianne.

1984. The evolution of noun incorporation. Language 60.847-94.

Moravcsik, Edith A.

1978. On the distribution of ergative and accusative patterns. *Lingua* 45.233-79.

Morison, Mrs. O.

1889. Tsimshian proverbs. *Journal of American Folklore* 2.285-6.

Mulder, Jean.

1982. The Tsimshian english dialect: the result of language interference. *Essays in Native American English*, ed. by H. G. Bartelt, S. P. Jasper, and B. L. Hoffer, 95-112. San Antonio, Texas: Trinity University.

1986. The structural organization of Coast Tsimshian music. Working Papers for the 21st International Conference on Salish and Neighboring Languages, Seattle.

Mulder, Jean, and Sm'algyax Language Teachers.
1981-1984. Sm'algyax language units: Nursery-Grade 3;
Primary basal readers:

Goo hooym da wup suwilaaksa [What we use at
school]
Xsmasgm ol, xsmasgm ol [Brown bear, brown bear]
Gooyu gwa'a? [What is this?]
Siipntut noo [I love my mother]
Adawgm galmiilk [The story about playing]
Adawgm wütsiin [The story of the mouse]
Goo magn sm nii maaxay [Why there are rainbows]
Dmxhoons Simon [A salmon for Simon]
Sts'ool dił awta [The legend of beaver and por-
cupine]
Adawgm sganiism mati [The mountain goats of
Temlaham]
Gahuu da amt'aa [The loon's necklace]
Goo gan laantga aks [The legend of why there are
tides]

Intermediate/adult support materials:

Learning the sounds and letters of Sm'algyax
Dzaba wilgagoosga [Learning to use the Coast
Tsimshian dictionary]
Liimim ama dalksk [A Sm'algyax hymnal and
cassette tape]

Intermediate/adult books:

Hana'a nt naksga gatgadaa [The legend of the
woman who married the loon]
Adawgm awta ada sts'ool [The legend of the
Beaver and the Porcupine]
Adawgm awta [The legend of the porcupine]
Adawgm txalpxdoolda 'wida sm'gyigyedm baask
[The legend of the four great chiefs of the
winds]
Adawgm lgu sgyen [The legend of little pitch]
Adawgm lis'yaan nt naksga sigidm hana'a [The
legend of the mink who married a princess]

Audio-visual materials:

slide-tape presentations:

Adawgm siksmeexs [The legend of strong man
who holds up the world]
Sm'algyagm ts'u'u'ts [Birds of the Tsimshian
region]

videotapes:

A potlatch [1981]
Raising a pole: A sharing of knowledge [1982]

Teaching support materials

Yearly Sm'algyax calendar
Sm'algyagm liimi [A songbook for primary grades
with cassette tape]
Xsta'an aama wila gy'on, Xsta'an 'wah 'yooksgn
[Certificate of achievement, Certificate of

recognition]

National Indian Brotherhood.

1972. Indian control of Indian education. Ottawa: National Indian Brotherhood.

Payne, Thomas E.

1982. Role and reference related subject properties and ergativity in Yup'ik Eskimo and Tagalog. Studies in Language. 6.75-106.

Ridley, William.

1880. Wilawal gigtangwaklthum gunklag ada tkani sha thash gaulthit [Morning Prayer]. Metlakatla: Bishop's Press. Original, Ayer Collection Tsimshian. Newberry Library, Chicago.

1881. Shimalgiagum Liamei [Hymns in Zimshian for the use of the Church at Metlakatla]. Metlakatla: Bishop's Press. Original, Ayer Collection Tsimshian. Newberry Library, Chicago.

1882a. Appendix a Shimalgiagum Liamei [Hymns in Zimshian for the use of the Church at Metlakatla]. Metlakatla: Bishop's Press. Original, Ayer Collection Tsimshian. Newberry Library, Chicago. Another, B.C. Provincial Archives, Victoria.

1882b. Am da malshk ga na damsh St. Matthew [The Gospel according to St. Matthew translated into Zimshian]. London: Society for Promoting Christian Knowledge. Original, Ayer Collection Tsimshian. Newberry Library, Chicago. Another, B.C. Provincial Archives, Victoria.

1882c. Am da malshk ga na damsh St. Mark [The Gospel according to St. Mark translated into Zimshian]. London: Society for Promoting Christian Knowledge. Original, Ayer Collection Tsimshian. Newberry Library, Chicago.

1885. Zimshian version of portions of the book of common prayer. London: Society for Promoting Christian Knowledge. Original, Ayer Collection Tsimshian. Newberry Library, Chicago. Another, B.C. Provincial Archives, Victoria.

1887. Am da malshk ga na damsh St. Luke [The Gospel according to St. Luke translated into Zimshian]. London: Society for Promoting Christian Knowledge. Original, Ayer Collection Tsimshian. Newberry Library, Chicago. Another, B.C. Provincial Archives, Victoria.

1887-1888. Ashigiamuk [The Sunbeam]. Shaonshkgum Metlakatla, vol. 1, July 1887, vol. 2, March 1888. Original, Ayer Collection Tsimshian. Newberry Library, Chicago

1888a. Wilawal gigtang waklthum gunklag. Ada tkani sha atkash gaultnit. Original, Ayer Collection Tsimshian. Newberry Library, Chicago.

1888b. Scripture cards. Baden: E. Kaufmann, Lahr. Original, Ayer Collection Tsimshian. Newberry Library. Chicago.

1889. Am da malshk ga na damsh [The gospel according to St. John translated into Zimshian]. London: Society for Promoting Christian Knowledge. Original, Ayer Collection Tsimshian. Newberry Library, Chicago. Another, B. C. Provincial Archives, Victoria.

1892. Shaonshgum shagait gigiengwaklthit [Portions of the book of common prayer in the Zimshian language]. London: Society for Promoting Christian Knowledge. Original, Ayer Collection Tsimshian. Newberry Library, Chicago. Another, B.C. Provincial Archives, Victoria.

1895. A grammar of the Zimshian language, with some observations on the people. MS. National Anthropological Archives. Smithsonian Institution.

1898. The epistles of St. Paul the apostle, The general epistles of Sts. James, Peter, John, and Jude [translated into Zimshian]. London: Society for Promoting Christian Knowledge. Original, B. C. Provincial Archives, Victoria.

Rigsby, Bruce.

1967. Tsimshian comparative vocabularies with notes on Nass-Gitksan systematic phonology. Working Papers for the 2nd International Conference on Salish and Neighboring Languages, Seattle.

1970. A note on Nass-Gitksan speech-play. International Journal of American Linguistics 36.212-15.

1975. Nass-Gitksan: An analytic ergative syntax. International Journal of American Linguistics 41.346-54.

1986. Gitksan grammar. MS.

Sapir, Edward.

1918. Key to Tsimshian sounds. MS. Library of the American Philosophical Society.

1921. A characteristic Penutian form of stem. *International Journal of American Linguistics* 2.58-67.

1929. Central and North American languages. *Encyclopedia Britannica*, 14th Ed. 5.138-41. Reprinted, 1949. *Selected Writings of Edward Sapir*, ed. by David G. Mandelbaum, 7-32. Berkeley: University of California Press.

Schachter, Paul.

1976. The subject in Philippine languages: Topic, actor, actor-topic, or none of the above. Subject and topic, ed. by Charles N. Li, 491-518. New York: Academic Press.

1977. Reference-related and role-related properties of subjects. *Syntax and Semantics*, vol. 8, ed. by Peter Cole and Jerrold M. Sadock, 279-306. New York: Academic Press.

Scouler, John.

1841. Observations on the indigenous tribes of the Northwest Coast of America. *Journal of the Royal Geographical Society of London* 11.215-50.

Seguin, Margaret.

1978a. Sm'algyax: Grades 3, 4, 5. Hartley Bay, B. C.: Hartley Bay Band Council.

1978b. Conversational completion in Sm'algyax: A place for consensus formation? Paper presented at the 43rd International Congress of Americanists.

1979a. Sm'algyax alphabet colouring book. Hartley Bay, B. C.: Hartley Bay Band Council.

1979b. Variation in code switching behavior: adolescents and elders - is there always a system? *Montreal Studies in Variation*, ed. by David Sankoff, 573-8.

1979c. The social meaning of Sm'algyax. Paper presented at the Congress of the Canadian Ethnology Society, Banff, Alberta.

Shotridge, Louis.

1919. A visit to the Tsimshian Indians. *Museum Journal of Pennsylvania* 10.117-48.

Silverstein, Michael.

1969. Tsimshian and Penutian possessives. Presented at the Annual Meetings of the American Anthropological Association, New Orleans.

1976. Hierarchy of features and ergativity. Grammatical categories in Australian languages, ed. by R. M. W. Dixon, 112-71. Canberra: Australian Institute of Aboriginal Studies.

1979. Penutian: An assessment. The Languages of Native America: Historical and Comparative Assessment, ed. by Lyle Campbell and Marianne Mithun, 650-91. Austin: University of Texas Press.

1981. Case marking and the nature of language. Australian Journal of Linguistics 1.227-47.

Susman, Amelia L.

1940a. Tsimshian materials. MS. Library of the American Philosophical Society.

1940b. Tsimshian phonemes. MS. Library of the American Philosophical Society.

1940c. Connectives in Tsimshian. MS. Library of the American Philosophical Society.

Swadesh, Morris.

1964. Comparative Penutian glosses of Sapir. Studies in California Linguistics, ed. by William Bright, 182-91. University of California Publications in Linguistics, no. 34.

Tarpen, Marie-Lucie.

1986. Nisgha possessives. Working Papers for the 21st International Conference on Salish and Neighboring Languages, Seattle.

Tate, Charles Montgomery.

1900. Tsimshian hymn: I'm going home to die no more. Original, Ayer Collection Tsimshian. Newberry Library, Chicago.

Tate, Henry W.

1902-1909. Tsimshian Texts. MS. Library of the American Philosophical Society.

Thompson, Pyms Nevins.

1878. Tsimshian. Aboriginal British Columbia, 18-35. MS. H.C. Bancroft Collection. University of California Libraries.

Tolmie, William Fraser.

1850. A Comparative vocabulary of Kittizoo (Tsimshian) and Kalispel (Salish). MS. Bureau of American Ethnology. National Anthropological Archives. Smithsonian In-

stitution.

1963. Physician and furtrader. Vancouver: Mitchell Press Limited.

Tolmie, William and George M. Dawson.

1884. Comparative vocabularies of the Indian tribes of British Columbia. (Geological and Natural History Survey of Canada.) Montreal: Dawson Brothers.

Usher, Jean.

1974. William Duncan of Metlakatla: A Victorian missionary in British Columbia. (Publications in History, no. 5.) Ottawa: National Museums of Canada.

Von der Schulenburg, Count A.F. Graf.

1894. Die Sprache der Zimshian-Indianer in Nordwest-America. Braunschweig: Richard Sattler. Reprinted 1972. Walluf bei Wiesseaden: Dr. Marin Sändig OHG.

Walbran, John T.

1971. British Columbia coast names. Vancouver: J.J. Douglas.

Wierzbicka, Anna.

1981. Case marking and human nature. Australian Journal of Linguistics 1.43-80.

1982. Case marking and the nature of discussion: a rejoinder to Silverstein. Australian Journal of Linguistics 2.93-5.

Wilson, E. F.

1890. The Zimshian Indian, parts 1 and 2. The Canadian Indian 1:77-86, 104-107.

Young, Ann, Gayle Dundas, and Mary Guthrie.

1979. Learning Tsimshian, Book no. 1. Ketchikan, Alaska: Ketchikan Indian Corporation.