GRAMMATICAL POSSESSION IN NUU-CHAH-NULTH

by

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ABSTRACT

The goal of this thesis is to provide a syntactic analysis of possessive constructions in NCN, a Southern Wakashan language. This thesis adopts a broadly minimalist perspective (Chomsky 1995) and draws on primary data from native speakers' intuitions in addition to published sources. Elicited data come mainly from speakers of the Ahousaht dialect, which is spoken on Flores Island, British Columbia.

I discuss three types of possessive constructions:

(i)   possessed DPs
(ii) possessed nominal predicates
(iii) possessor raising

The third type, possessor raising, is of special interest: A possessive marker referring to a possessed subject DP can attach to that subject's predicate. Subject agreement on the predicate then indexes the possessor, not the possessed subject. Unlike in other types of possession, the possessor and its possessum do not form a single constituent. In contrast to parallel structures cross-linguistically, Nuu-chah-nulth possessor raising can occur only from possessed subjects, but it is otherwise unrestricted by possessor or predicate type.

I propose for Nuu-chah-nulth that the possessive morpheme corresponds to a possessive head in the functional architecture of either the DP or clausal domain. Both the Possessive Phrase and a possessor DP are associated with a possessive feature. Where the possessive marker is generated above a possessed subject DP, the possessor must raise out of it in order to check this feature.

I furthermore adopt the theory of multiple feature checking (Ura 1996), such that the possessor DP may be associated with both a possessive and a set of agreement (Φ) features. This allows the possessor to raise further, and check its agreement features with the head that hosts subject inflection. By occupying this higher position the possessor determines inflection structurally, without being directly linked to the external argument of the predicate.

This analysis suggests that the notion of "subject" is split between at least two syntactic positions. Evidence illustrating clear subject-object asymmetries as well as data suggesting A-movement of the possessor supports a configurational, rather than discourse-driven, view of Nuu-chah-nulth grammar.

TABLE OF CONTENTS

Key to Glosses

( ) - contains optional elements
∅ - expletive morpheme
1,2,3 - first, second, third person
AUX - auxiliary
BEN - benefactive
CAUS - causative
CONT - continuous
DEF - definite
DEIC - deictic
DEM - demonstrative
DET - determiner
DIM - diminutive
DUB - dubitative
DUR - durative, formerly IMP (imperfective) in previous literature
HAB - habitual
IMPR - imperative
INAL - inalienable possessive
INCEP - inceptive
INT - interrogative
IND - indicative
INENT - intentive future
I.REL - indefinite relative
IRR - irrealis
FUT - future
MOOD - mood
PASS - passive
PERF - perfective, formerly MOM (momentaneous) in previous literature
PL - plural
POSS - possessive
PRO - pro (in examples from Davidson (2002), otherwise noted as subject agreement)
PST - past
QUOT - quotative
R - reduplicant
[+R] - follows a reduplicating morpheme
REL - definite relative
S - singular
SUBOR - subordinate
TEMP - temporal marker, sometimes glossed as "now" or "future"

Abbreviations

POSS - possessive clitic (*-uk, -(ʔ)ak*, or *-ʔat*)
PR   - possessor raising
PSM - possessum (or possessee)
PSR - possessor

Note about the orthography

There is no official writing system in use for Nuu-chah-nulth. Although most communities and groups of linguists have adopted some variation of the Americanist writing system, the IPA is also commonly used. The symbols used in this thesis are one variation of the Americanist system, in which a glottal stop is represented by '*ʔ*' and long vowels are represented by doubled characters ('*VV*').

The following consonant and vowel charts provide a general overview of the Nuu-chah-nulth sound system represented by the writing system I use. These are closely based on tables from Davidson (2002:10-13), who generally follows Sapir and Swadesh's (1939) categorization.

Nuu-chah-nulth consonants:

	Labial	Dental	Alveolar	Lateral	Alveo-Palatal	Velar	Labialized Velar	Uvular	Labialized Uvular	Pharyngeal	Glottal
Stops	p	t	c	ƛ	č	k	kʷ	q	qʷ	ʕ	ʔ
Ejectives	p̓	t̓	c̓	ƛ̓	č̓	k̓	k̓ʷ	q̓	q̓ʷ		
Fricatives			s	ɬ	š	x	xʷ	x̣	x̣ʷ	ḥ	h
Sonorants	m	n			y		w				
Glottalized sonorants	m̓	n̓			y̓		w̓				

IPA equivalents:

NCN:	IPA:
c	[ts]
č	[tʃ]
ƛ	[tɬ]
š	[ʃ]
x̣	[χ]
ḥ	[ħ]

Nuu-chah-nulth vowels:

	Front		Central		Back	
	NCN	IPA	NCN	IPA	NCN	IPA
High	i, ii	[ɪ], [iː]			u, uu	[ʊ], [uː]
Mid	e, ee	[ɛ], [eː]			o, oo	[ɔ], [ɔː]
Low			a, aa	[a], [aː]		

ACKNOWLEDGEMENTS

1   Introduction

The goal of this thesis is to document the morphology and syntax of possession in Nuu-chah-nulth and to provide an analysis that accounts both for 'simple' possessive structures in predicate and argument positions as well as for the subject possessor raising construction.

Chapter 1 briefly describes the language setting (1.1), previous literature on Nuu-chah-nulth (1.2) and the research methods used in this thesis (1.3).

Chapter 2 provides a general overview of Nuu-chah-nulth morphosyntax as is relevant to the examination of possessive structures. This includes a basic description of the formation of words, agreement, my assumptions about clausal and DP structure, and word order.

Chapter 3 lays out Nuu-chah-nulth data and generalizations relating to possession. The alienable and inalienable possessive clitics are introduced and their attachment on DPs, predicates, and predicate nominals are discussed in turn.

Chapter 4 summarizes the generalizations from possessor raising data in contrast to possessed nominal predicates and suggests a morphosyntactic analysis to account for them. The proposed structures provide a configurational definition of subjecthood in Nuu-chah-nulth.

Chapter 5 concludes with a summary of the implications of this thesis. Finally, I give a brief cross-linguistic typology in which Nuu-chah-nulth is compared to other possessor raising languages.

1.1   Language setting

Nuu-chah-nulth[1], formerly known as Nootka, is spoken along the West Coast of Vancouver Island, British Columbia, from Kyuquot Sound in the north to Barkley Sound in the south. It forms the Southern branch of the Wakashan language family along with Ditidaht (spoken south of Nuu-chah-nulth on Vancouver Island) and Makah (spoken on the Olympic Peninsula near Neah Bay, Washington state).

<div align="center">

Wakashan[2]

Northern   Southern
Haisla-Henaksiala (Kitimat)   Ditidaht (Nitinaht)
Heiltsuk (Bella Bella)   Makah
Kwakw'ala (Kwakiutl)   Nuu-chah-nulth (Nootka)
Oowekyala (Oowekeeno)

</div>
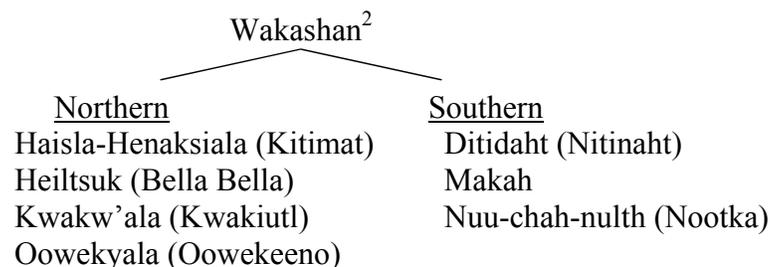
The term *Nootka* is not preferred by this language community, and it has fallen further out of favour since the Tribal Council officially embraced the name

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[1] A note about the spelling of *Nuu-chah-nulth*: This word is seen written with and without dashes, as well as with and without capitalization of the first letter of each syllable. Herein I follow the form currently employed by the Nuu-chah-nulth Tribal Council.

[2] Source: The Wakashan Linguistics Page, March 2005: http://depts.washington.edu/wll2/languages.html

Nuu-chah-nulth in 1978. These terms are not directly equivalent: *Nootka* is a language-based designation, while *Nuu-chah-nulth* is both a political entity that includes the Ditidaht people and a linguistic designation that does not.

Furthermore, within Nuu-chah-nulth territory, dialect divisions do not correspond directly to political divisions. Fourteen member bands are organized under the Nuu-chah-nulth Tribal Council today, while there are approximately 12 dialects spoken (Rose 1981, Howe 2000)[3].

Nuu-chah-nulth

Dialects[4]		First nations[5]	
1.	Ahousaht (ʕaaḥuusʔatḥ)	1.	Ahousaht
2.	Ehattesaht (ʕiiḥatisʔatḥ)	2.	Ehattesaht
3.	Hesquiat (ḥiškʷiiʔatḥ)	3.	Hesquiaht
4.	Kyuquot (qaaẏuukatḥ)	4.	Ka:'yu:k't'h/ Che:k'tles7et'h'
5.	Mowachaht (muwačʼatḥ)	5.	Mowachaht/ Muchalaht
6.	Nuchatlaht (nučaaɬʔatḥ)	6.	Nuchatlaht
7.	Ohiaht (huuʔiiʔatḥ)	7.	Huu-ay-aht
8.	Tseshaht (čišaaʔatḥ)	8.	Tseshaht
9.	Clayoquot (ƛaʔuukʷiʔatḥ)	9.	Tla-o-quiaht
10.	Toquaht (tʼukʷaaʔatḥ)	10.	Toquaht
11.	Uchuklesaht (ḥuučuqƛisʔatḥ)	11.	Uchucklesaht
12.	Ucluelet (yuuɬuʔiɬʔatḥ)	12.	Ucluelet
		13.	Hupacasath
		14.	Ditidaht

The community within each band includes speakers of different dialects. This is the result of many causes such as, for instance, marriage across bands. So although given dialects are associated with specific geographical locations, there is not a one-to-one correspondence between an individual's band affiliation and dialect. In this thesis, when a speaker is associated with a given geographical area, the area of their language dialect is intended.

The map of Wakashan language groups below is intended as a general reference of the location of dialects in relation to each other; this is specifically not a political map.

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[3] Rose notes that native speakers posit between 14 and 20 Nuu-chah-nulth dialects (1981:6). A formal comprehensive dialect survey on Nuu-chah-nulth has not been completed.
[4] As listed by Kim (2003:1), citing Howe (2000:6). Although this matches the dialects described in a cross-dialectical dictionary edited by Powell (1991), it clearly is not comprehensive. For instance, to my knowledge Hupacasath has not been investigated as a dialect. The Huu-ay-aht Nation (H. Kammler, p.c.), which recently contributed to a dictionary project (2004) and is in the process of negotiating a treaty with the Nuu-chah-nulth Tribal Council, has not been listed at all.
[5] As listed by the Nuu-chah-nulth Tribal Council, March 2005: http://www.nuuchahnulth.org/

Approximate geographical distribution of Southern Wakashan

The map shows Vancouver Island with the following locations labeled: 30 mi, 30 km, Kyuquot, Ehattesaht, Nuchatlaht, Mowachaht, Hesquiat, Ahousaht, Clayoquot, Ucluelet, Tseshaht, Toquaht, Uchuklesaht, Ohiaht, Ditidaht, Makah.
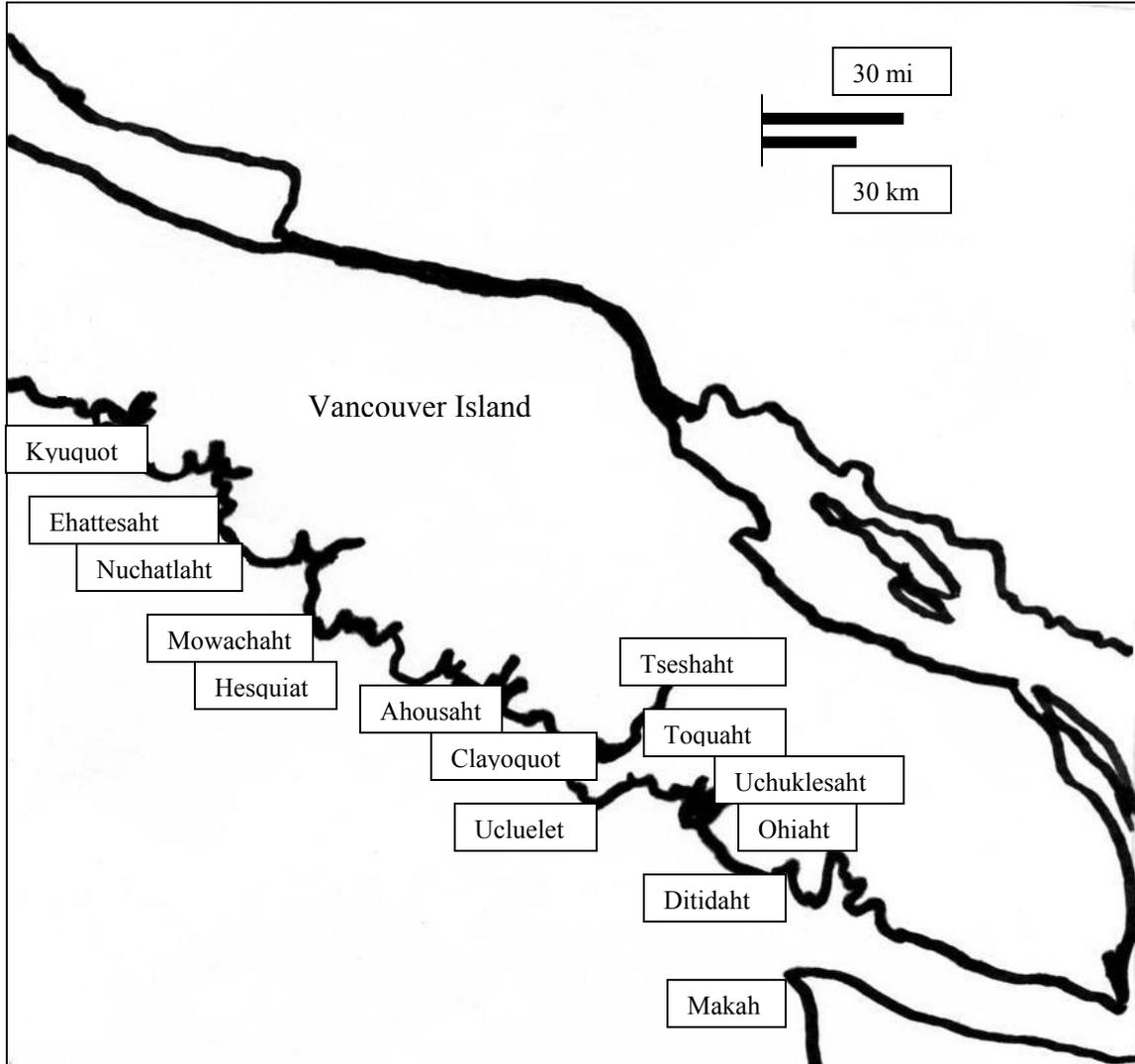
The two centuries following European contact have had a tragic impact on this language, which now faces the imminent loss of its remaining native speakers. The 2001 Canada census reports 505 speakers of Nootka[6] out of a population of several thousand. However, this reduces to 205 speakers who use the language regularly, or 15 speakers who use only Nootka at home[7]. It should be noted that the term *Nootka* on the census

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[6] Source: Statistics Canada, 2001 Census,
http://www12.statcan.ca/english/census01/products/standard/themes/RetrieveProductTable.cfm?Temporal=2001&PID=55539&APATH=3&GID=431515&METH=1&PTYPE=55440&THEME=41&FOCUS=0&AID=0&PLACENAME=0&PROVINCE=0&SEARCH=0&GC=99&GK=NA&VID=0&FL=0&RL=0&FREE=0

[7] Source: Statistics Canada, 2001 Census,
http://www12.statcan.ca/english/census01/products/standard/themes/RetrieveProductTable.cfm?Temporal=2001&PID=55536&APATH=3&GID=431515&METH=1&PTYPE=55440&THEME=41&FOCUS=0&AID=0&PLACENAME=0&PROVINCE=0&SEARCH=0&GC=99&GK=NA&VID=0&FL=0&RL=0&FREE=0

encompasses the Southern Wakashan language Ditidaht as well, although the number of remaining Ditidaht speakers is not so large that these figures should be considered non-representative of the situation. Linguistic sources echo these reports: Cook and Howe (2004) for instance estimate 200 Nuu-chah-nulth speakers remaining (and less than 10 for Ditidaht). Crucially, those who speak the language fluently are characteristically elderly, and the generation-gap between speakers and non-speakers is widening (c.f. Kim 2003).

Interest in language retention and revitalization is growing in the Nuu-chah-nulth communities, however. In 1991 the Nuu-chah-nulth tribal council published a preliminary cross-dialectical dictionary, edited by J. Powell. This was followed in 2004 by a phrase book and dictionary published by the Barkley Sound Dialect Working Group of the Huu-ay-aht, Ucluelet, Toquaht, and Uchucklesaht First Nations. At least one other active study group has formed on Nuu-chah-nulth, at the home of an Ahousaht speaker in Port Alberni, which regularly publishes educational articles in the Nuu-chah-nulth newspaper *Ha-Shilth-Sa* and is developing larger language and culture-related publications. In addition to local efforts, a working group on the Nuu-chah-nulth language has formed at the University of Frankfurt, Germany. Presently including Olaf Behrend and Henry Kammler, this group is working to create a language textbook and is assisting in other educational initiatives. However, despite the appearance of these and similar projects, revitalization remains a considerable challenge.

1.2   Previous literature

Introductory scholarly work on Nuu-chah-nulth was conducted by Sapir and his student Swadesh in the 1910's through 1930's. In addition to the publication of academic papers, the two collected a vast number of texts which have been published as collections in 1939 (*Nootka Texts*), 1955 (*Native Accounts of Nootka Ethnography*) and more recently in 2004 (*The Whaling Indians: Legendary Hunters*). These texts mainly document the Tseshaht dialect, but also include Ucluelet, Ahousaht and Clayoquot to a lesser degree. The earlier two collections have been the basis of much of the scholarly work that followed.

From the 1930's to the late 1970's Nuu-chah-nulth was studied by Jacobsen (1969a,b, 1973, 1979, 1993), Haas (1969a,b, 1972, 1979), and Klokeid (1969a,b, 1970, 1972), although attention to Southern Wakashan languages was mainly focused on Ditidaht and Makah during this time. Major contributions include the extensive work of Jacobsen on Makah and Klokeid on Ditidaht, among others, in the 1960's and 1970's.

In the last twenty five years, four PhD theses have been written specifically on Nuu-chah-nulth: Rose's (1981) grammar on the Kyuquot dialect, Nakayama's (1997) and Kim's (2003) dissertations on the Ahousaht dialect, and Davidson's (2002) dissertation on both Makah and Tseshaht Nuu-chah-nulth. Interest by linguists is growing: John Stonham currently heads an investigation of Nuu-chah-nulth grammar at the University of Newcastle Upon Tyne, England, out of which a dictionary based on Sapir's documentation of the Tseshaht dialect has recently been published (Stonham 2005). The current thesis comes out of a research project on Nuu-chah-nulth at the University of British Columbia under the direction of Henry Davis and Douglas Pulleyblank.

An ongoing resource for information on the language can be found on the internet at the Wakashan Linguistics Webpage, hosted by the University of Washington at: http://depts.washington.edu/wll2/ .

1.3   Methodology

This thesis adopts a broad Minimalist framework (Chomsky 1995), drawing on primary data from native-speakers' intuitions in addition to published sources. Unless otherwise noted, all data were collected during my fieldwork in British Columbia between 2002 and 2005.

Data were most often recorded as handwritten notes, and sometimes this was assisted by the use of tape recording. These notes were then checked for accuracy with one or both of my primary language consultants. Isolated sentences and intuitions about their meaning and grammaticality were elicited with first-language Nuu-chah-nulth speakers, sometimes with a discourse context provided by either myself or the speaker. Every effort was made to check a given grammaticality judgement or intuition about meaning at least twice with my chief consultants at different times, and differences in their judgements were checked with other speakers. Data from textual materials, often from the Kyuquot (Rose 1981) or Tseshaht (Davidson 2002) dialects, were also checked for judgements. Relevant grammatical phenomena were found to be the same across the dialects investigated, unless otherwise noted.

Some of the sentences that consultants were asked to translate are pragmatically unusual, in order to more clearly illustrate a grammatical principle. (For instance a sentence like "*My teacher bit a dog*," instead of vice versa, aided investigation of the relationship between possession and subjects or objects.) It is not intended by any means that the content of the data herein is representative of Nuu-chah-nulth culture or usual discourse.

The main speakers consulted in the course of this research were Mary Jane Dick and Katherine Fraser. Both come from the Ahousaht band and speak the Ahousaht dialect, were born in the late 1940's, and hold a B.A. in Linguistics. They provided invaluable assistance by checking the accuracy of data in my notes and in earlier drafts of this thesis. Mary Jane Dick was my primary source in the identification of morphemes for the morphological break-down of data. I elicited less often with the following consultants, who are aged in their 70's and 80's. Sarah Webster and Josephine Thompson were consulted on the Ahousaht dialect. Josephine's husband Archie Thompson was consulted as a native speaker of the Ucluelet dialect[8], as was Barbara Touchie. I also worked with Barney Williams Jr., who is a native speaker of the Clayoquot dialect. All the speakers I consulted either use Nuu-chah-nulth daily at home or in their place of work, but they are all fluent in English as well. Notably, most of them avoided attendance of residential school for some period of time during their childhoods.

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[8] Archie and Josephine Thompson tell me that they converse in Nuu-chah-nulth regularly, each using their own respective dialect, and that this is perfectly mutually intelligible for them.

2 Overview of Nuu-chah-nulth morphosyntax

This chapter provides a brief background on Nuu-chah-nulth (henceforth NCN) morphosyntax relevant to the possessive constructions that will be discussed in this thesis. Organization is as follows. First, section 2.1 provides a general inventory of NCN possessive constructions. Section 2.2 discusses issues of word formation and explains the differences between various types of affix. Section 2.3 introduces my assumptions about the structure of the clause and the representation of agreement (2.3.2). Word order (2.3.3) and noun incorporation (2.3.4) are then discussed, together with my assumptions about the nature of the passive in NCN (2.3.5), including its sensitivity to a person/animacy hierarchy (2.3.6). The structure of DP, which is broadly parallel to the clausal domain, is presented in 2.4. The "determiner" is described in 2.4.2. The well-known ability of NCN verbs, nominals, adjectives and adverbs to serve as either predicate or argument is reviewed in 2.5. Section 2.6 describes the structure of nominal predicates. Finally, section 2.7 describes independent pronouns.

2.1 Possessive expressions in Nuu-chah-nulth

This thesis will focus on three types of possessive construction. In the first, a possessive clitic plus agreement marking is attached to the possessum within a possessive DP (3.3). The second construction involves possessed nominal predicates (3.5). The third is the subject possessor raising construction, in which a possessive relation contained within an argument is expressed with possessive morphology on a higher predicate (Chapter 4).

In addition to possession expressed by a possessive clitic, there are several verbs in Nuu-chah-nulth that lexically express ownership or belonging. These include at least the following: *-iic (belonging to), -aas (to belong to),* and *-naak (to own/have)*[9].

(1) Ɂač**iicḥ** tiiča John
     Ɂača –**iic** –ḥ   tiiča   John
     who-**belong**-3INT teacher John
     'Whose teacher is John?' (Context: Of the listener's three kids...)

(2) siỷa**aas**iš Ɂaḥṅiis ƚapḥs̓patuɁatɁi cixw̓atin[10]
     siỷa –**aas** –siš   Ɂaḥṅii -as   ƚapḥs̓patu –Ɂat –Ɂi   cixw̓atin
     me - **belong**-1S.IND   DEIC -on.a.surface wing   -INAL -3   eagle
     'That eagle's wing belongs to me.'

(3) Ɂu**naak**šiƛsiš čʼapac
     Ɂu –**naak** –šiƛ –siš   čʼapac
     ∅ –**own** -PERF -1S.IND canoe
     'I (now) own/have/possess a canoe.'

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[9] These verbs are in fact a type of lexical suffix (Sapir and Swadesh 1939, Rose 1981, Davidson 2002, among others) or "affixal predicate" (Wojdak 2003, 2004a,b, in prep). They exist only as a bound root which must incorporate their object or the expletive morpheme *Ɂu-* (Stonham 1998, Davis and Sawai 2001).

[10] The felicity of *-aas* seems to be dependant on the possessed item being within in sight, but more data is needed to confirm this.

While their existence is important to note, I will not discuss verbs of possession further in this thesis.

Finally, Rose (1981) notes for Kyuquot that possession can be implied without being marked in certain discourse contexts, especially with kin terms. This is true in Ahousaht as well.

(4)   t̓ičiƛčipʔiš m̓uksʔi
        t̓ičiƛ –čip –ʔiš   m̓uksʔi
        throw -BEN-3IND   rock
        'He [Adam] threw his [Ken's] rock.' (speaker-volunteered sentence)

(5)   wiwiišʔaqƛukʔiš   tiiča t̓an̓a
        wiwiišʔaqƛ -uk –ʔiš   tiiča   t̓an̓a
        lazy   -POSS -3IND   teacher child
        'Our child's teacher is lazy.'[11]
        Context: wife speaking to husband, where they have only one child. The reading
        * 'The/A child's teacher is lazy' is rejected.

2.2   Word formation

Nuu-chah-nulth words demonstrate agglutinative morphological structure, whereby roots are followed by a chain of suffixes and then clitics in a strictly fixed order (Davidson 2002, Werle 2002, Kim 2003). Aside from reduplication and incorporation, NCN lacks prefixes and proclitics (c.f. also Chung 2004 on Kwakw'ala).

The following chart is borrowed from Davidson (2002:93), in which word structure is simplified to illustrate the general schema. The term "unextended word" (Swadesh 1933, 1939) refers to the element(s) carrying the lexical meaning of the word, without the syntactic information expressed by clitic attachment.

(6)   *word structure*

base	lexical suffixes	aspect suffix	clitics
unextended word			
extended word			

A crucial difference between the "suffix" and "clitic" classifications is that suffixes mainly carry lexical content (with the exceptions of e.g. aspect) and may attach to either free or bound roots, while clitics are functional categories and may only attach to otherwise complete words. For a detailed description of the phonological and morphological differences between suffixes and clitics, see Davidson (2002:252–254).

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[11] Only "teacher" is overtly marked for possession here. The possession of "child" is implied from the context.

2.3 The clause

Clause-level enclitics appear in the following fixed order (Davidson 2002:321)[12]:

(7)　　-DIM-INTENT-CAUS-TEMP-PASS-POSS-IRR-FUT-PST-MOOD-PRO-3PL-again-HAB

For further analysis of enclitic ordering in Southern Wakashan, see Werle (2002).
　　　　The clausal clitic sequence comes in second position: that is, it attaches to the first prosodic word in the clause. This is usually the matrix predicate but can also be, for instance, a relative marker in a relative subordinate clause (8)-(9). Where the clausal head is modified by a preceding adverb, the clitic sequence attaches to the adverb (10).

(8)　　ʔaʔatuumitʔiš [qʷicačiƛii Lucy]
　　　　ʔa -ʔatuu **-mit -ʔiš**　　[qʷi　　-ca -šiƛ **-ii**　　　　Lucy]
　　　　R -ask　**-PST -3IND**　　[where -go-PERF**-3I.REL** Lucy]
　　　　'She asked [where Lucy went].'　　　　　　　　(UBC Ling 431 database 2003)

(9)　　n̓aatsiičiƛitsiš piišpiš [yaaqʷiƛʔatukʷitiis m̓ačiʔat ʕiniiƛ]
　　　　n̓aatsii-šiƛ **-mit -siš**　　piišpiš [yaq -ʔuukʷiƛ**-ʔat -uk -mit -iis**　　m̓ačiƛ-ʔat ʕiniiƛ]
　　　　see　-PERF**-PST-1S.IND** cat　[REL-do.to**-PASS-POSS-PST-1S.I.REL** bite-PASS dog]
　　　　'I saw the cat [which bit my dog].' ('I saw the cat [which my dog was bitten by].')

(10)　　ḥacukʷitʔiš waʔič Ken
　　　　ḥacuk **-mit -ʔiš**　　waʔič Ken
　　　　deeply **-PST -3IND**　sleep Ken
　　　　'Ken was sleeping deeply.'

2.3.1 CP structure

　　　　Wojdak (in prep) proposes a right-branching specifier structure across all categories for NCN:

(11)

In her analysis of affixal predicates (also known as predicative governing lexical suffixes, see also Rose 1981, Nakayama 1997, Davidson 2002, among others), Wojdak illustrates how this configuration correctly predicts syntactic effects of incorporation that are not fully accounted for by a left-branching analysis.

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[12] In addition to this causative>>possessive ordering, Davidson also shows for the Tseshaht dialect that where the possessive and causative morphemes co-occur, the order changes to possessive>>causative (2002:321-323). However, available Ahousaht data show no such alternation. I know of no other differences in clitic order between dialects at this time.

Adopting her configuration, I will assume the structure in (12) for a typical NCN clause.

(12)

```
                              CP
                      C'_____
                      _____
                              MoodP
                  Mood'_____
                  _____
          Mood-Agr          TP
                      T'_____
                      _____
              T               vP
                  v'_____
                  _____
                          VP        DP-SUBJECT
                  V'_____
                  _____
              V           DP-OBJECT
```
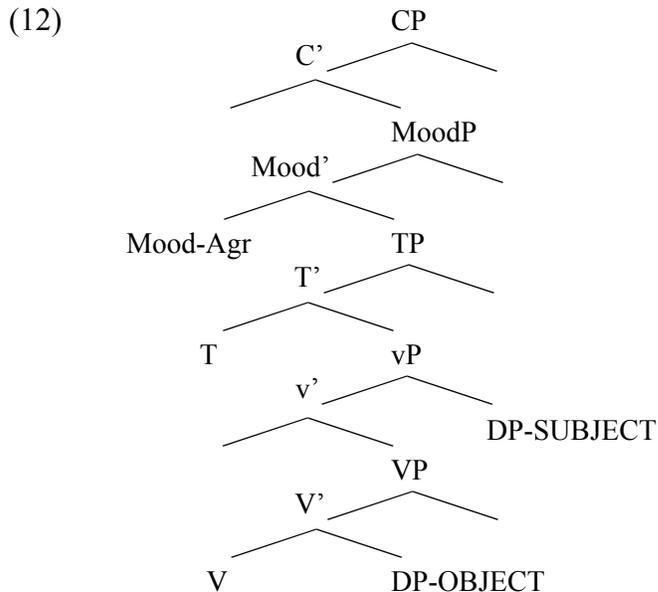
I further follow Wojdak (in prep) in assuming that cliticization to the leftmost element of the clause is prosodically determined. Specifically, I assume that clitics attach at PF via morphological merger (Marantz 1988), which is canonically used to express second position effects. This process allows a clitic to attach to the right edge of the first prosodic word of a linearly adjacent constituent, as in (13):

(13)   *Morphological merger*

   X [Y ...] → [Y + X ...

This process accounts for the appearance of the clitic sequence on the initial element of a clause, regardless of that element's lexical category. In effect, this process mimics Baker's (1985) Mirror Principle of syntactic movement, but crucially without invoking syntactic head movement.

Because Morphological Merger is strictly local, the clitic closest to the head in the linear string must be the first to attach to it. This means that, assuming Merger operates in a bottom-up fashion, the clitics will appear in the inverse order to their position in the tree. For instance, "*Adam threw the rock*," is represented below prior to merger.

(14)
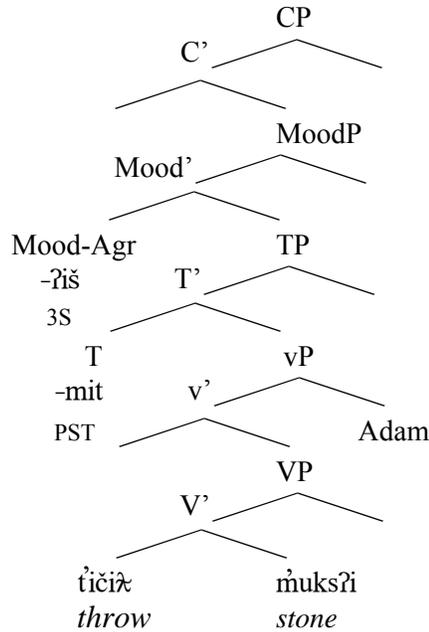
```
                              CP
                      C'
                                      MoodP
                  Mood'
            Mood-Agr          TP
             -ʔiš        T'
              3S                    vP
                    T         v'
                   -mit                    Adam
                   PST                vP
                          V'
                     t̓ičiⱡ        m̓uksʔi
                     throw         stone
```

t̓ičiⱡitʔiš Adam m̓uksʔi
t̓ičiⱡ – mit – ʔiš   Adam   m̓uksʔi
throw-PST-3IND Adam stone/rock
'Adam threw the stone/rock.'

A linearization of this syntactic representation looks like this:

(15)   input to PF: <u>Mood</u> + <u>T</u> + V ...

        merger 1:   <u>Mood</u> + [V - T] ...

        merger 2:   [[V - T] - Mood] ...

✓ *predicted order:*   t̓ičiⱡ – mit – ʔiš ....

Note that this model involves no syntactic movement of either the clitic or its host. Cliticization is assumed to be purely prosodic.

2.3.2 Subject agreement

The head of a clause, which will be the first element in the clause unless it is modified, is inflected to agree in person and number with the grammatical subject of that clause. Subject agreement is sufficiently rich to license null subjects. Nuu-chah-nulth does not have grammatical gender.

(16)   ḥininʔaⱡʔiš John
        ḥinin -ʔaⱡ -ʔiš   John
        arrive -TEMP -3IND John
        'John arrived.'

(17) ḥininʔaƛʔiš
      ḥinin –ʔaƛ –ʔiš
      arrive -TEMP -3IND
      'S/He arrived.'

(18) ḥininʔaƛsiš
      ḥinin –ʔaƛ –siš
      arrive -TEMP -1S.IND
      'I arrived.'

Although Mood and Pronominal markers are listed as separate sequential morphemes in Davidson's schema (2.3), I follow Davis and Sawai (2001) in assuming that that the final morpheme on a clausal head is a portmanteau Mood and Subject Agreement marker[13]. Subject agreement is often fused with Mood in contemporary NCN, despite evidence that the two were once separate (Rose 1981). In an attempt to remain neutral on the topic of the diachronic sources of the Mood/Agreement paradigms, I will refer to these together simply as "mood" hereafter.

The full subject agreement paradigm for the indicative mood appears below, illustrated with the verb *haʔuk* (*to eat*).

(19) *Ahousaht indicative agreement paradigm:*

	Singular		**Plural**
1st	haʔuk-**siš** eat -1S.IND 'I am eating.'		haʔuk-**niš** eat -1PL.IND 'We are eating.'
2nd	haʔuk-**ʔick** eat -2S.IND 'You-sg are eating.'		haʔuk-**ʔicuuš** eat -2PL.IND 'You-PL are eating.'
3rd[14]	haʔuk(-**ʔiš**) Ken eat (-3IND) Ken 'Ken is eating.'		haʔuk(-**ʔiš**-(**ʔaƚ**)) Ken & Kay eat (-3IND-(PL)) Ken & Kay 'Ken and Kay are eating.'

I assume that agreement is structurally determined. Hence, the appropriate morpheme above will match the person and number of the occupant of Spec, MoodP.

---

[13] This disregards cases of "again" and the habitual morpheme: most often Mood-Agreement is the final clitic in the string.
[14] Rose (1981) Nakayama (2001) and Davidson (2002) give evidence that third person subject agreement is null or non-existent, such that third person as represented in this paradigm is the mood marker alone. Elements in parentheses are optional.

(20)

```
                        MoodP
            Mood'_____/‾‾‾‾‾‾‾‾\
           __/‾‾‾‾‾\__         1.PL DP
      1.PL Agr    ◄──────────────┘
```

I assume that the subject is base-generated in Spec, vP (see 2.3.1), and I propose the MoodP has agreement (Φ) features, which the subject DP raises to check.

(21)

```
                        CP
            C'_____/‾‾‾‾‾‾‾‾\
          __/‾‾‾‾‾\__
                      MoodP
          Mood'___/‾‾‾‾‾‾\
        __/‾‾‾‾‾\__      Adam
   Mood-Agr      TP
    -ʔiš      T'__/‾‾‾‾\__
   3S [+3]  __/‾‾‾‾\__
        T          vP
      -mit    v'__/‾‾‾‾\__
      PST   __/‾‾‾\__   t_Adam
                  VP    [+3]
          V'___/‾‾‾\__
        __/‾‾‾\__
     t̓ičiƛ      m̓uksʔi
     throw      stone
```

t̓ičiƛitʔiš Adam m̓uksʔi
t̓ičiƛ – mit – ʔiš   Adam   m̓uksʔi
throw-PST-3IND Adam stone/rock
'Adam threw the stone/rock.'

A matching feature of MoodP and the subject DP hence attract the subject to Spec, MoodP, where it determines agreement.

Rose reports for Kyuquot that "ellipsis of mood and other inflectional morphemes can take place whenever the previous marked matrix predicate has the same inflectional affixes (1981:225)." I have found one instance of this in Ahousaht, where null mood, or absolutive mood, can also follow third person quotative marking[15]. This is only possible within a line of dialogue, after the quotative mood has already been established.

First sentence: Mood marker is obligatory

(22)   a.   wik̓atwaʔiš ʔaanaqḥ–ʔat ʔiiḥkumc ḥaa čakupʔi
           wik –ʔat –**waʔiš**   ʔaanaqḥ –ʔat   ʔiiḥkumc ḥaa   čakup-ʔi
           NEG –PASS-**3QUOT** real   -PASS thumb   DEIC man -DET
           'That man doesn't have a real thumb.'

---

[15] Other moods were not tested in this respect, but there is no reason to believe this effect differs from Kyuquot.

b. * wiḳat ʔaanaqḥ-ʔat ʔiiḥkumc ḥaa čakupʔi
wik -ʔat ʔaanaqḥ -ʔat ʔiiḥkumc ḥaa čakup-ʔi
NEG –PASS real -PASS thumb DEIC man -DET
'That man doesn't have a real thumb.'

Within story: Mood marker optional[16]

(23) ✓ʔuḥtinʔaƛat ʔiiḥkumc čʼičʼiisaqḥtumʔatʔi
ʔuḥtin -ʔaƛ -ʔat ʔiiḥkumc čʼičʼiisaqḥtum -ʔat -ʔi
made.of -TEMP -PASS thumb toe(s) -INAL -3
'Now his thumb is made out of his toe(s).'

Finally, NCN predicates do not agree with objects. This contrasts with the related Makah language, in which predicative agreement indexes the subject and sometimes a second grammatical role, usually an object (Davidson 2002:100). Although Makah licenses both null subjects and null objects, NCN does not license null objects.

(24) *Makah*:

daacsʔaƛsiicux̣
daacsa –ʔaƛ –siicux̣
see -TEMP -1S/2S.IND
'I [Subj] see you [Obj].' (Davidson 2002:101)

(25) *Ahousaht*:

a. ńaatsaasiš
ńaatsii–a –siš
see -CONT -1S.IND
* 'I see you.'

b. ńaatsaasiš suẃa
ńaatsii–a –siš suẃa
see -CONT -1S.IND 2S
✓ 'I see you.'

2.3.3 Word order

As noted by Swadesh (1939), Jacobsen (1993), and Rose (1981) among others, the unmarked surface word order in NCN is predicate-initial. The ordering of overt subjects and objects varies, however.[17]

---

[16] This is the end of a description of a man whose severed finger has been surgically replaced with one of his toes.
[17] Sentences containing both and overt subject and an overt object are uncommon in discourse in NCN, as with many other West coast languages (Nakayama 2001, among others).

Rose (1981), as just one example, observes VSO, VOS, SVO, OVS, VS and VO orderings in a set of non-elicited (conversation or monologue) sentences. Nuu-chah-nulth word order is not free, however. Along with Rose's observations she provides evidence that many of these forms must be derived. "Alternate sentence structures do not... occur randomly but are a function of the communicative salience of constituents (1981:179-180)," as well as changes due to stylistic principles. Most of the data presented in this thesis show VSO order, although this is not reflective of the full range of possible word orders. Simply, the issue of major constituent order is orthogonal to the main concerns of this thesis.

I will follow Wojdak's (in prep) proposal that the underlying word order is VOS and that other forms are derived from this underlying order. This is consistent with the order of elements in structure (12) (2.3.1).[18]

2.3.4 Noun incorporation

There is a class of "affixal predicates" in NCN that incorporate an object into the predicate (26a) (Davis and Sawai 2001, Wojdak 2003, 2004a,b, Stonham 2005). Subjects cannot be incorporated (26b)[19]. In the absence of incorporation, these predicates attach to the morpheme *ʔu–* (26c).

(26)   a.   maḥt̓iiʔamitʔiš čakup
            maḥt̓ii–ʔaap–mit–ʔiš čakup
            house-buy-PST-3IND man
            'A man bought a house.'   (adapted from Wojdak 2004a)

       b. * čakupaamitʔiš maḥt̓ii
            čakup–ʔaap–mit–ʔiš maḥt̓ii
            man-buy-PST-3IND house
            'A man bought a house.'   (adapted from Wojdak 2004a)

       c.   ʔuʔaamitʔiš čakup maḥt̓ii
            ʔu–ʔaap–mit–ʔiš čakup maḥt̓ii
            ∅-buy-PST-3IND man house
            'A man bought a house.'   (adapted from Wojdak 2004a)

Although affixal predicates are a prominent and unusual feature of NCN syntax, they do not figure prominently in this thesis: I refer the reader to Wojdak (2003, 2004a,b, in prep) for detailed discussion.

---

[18] This contrasts with alternative VSO-order accounts such as Davis and Sawai (2001) or Lee (2000), among others.

[19] Davis and Sawai (2001) note one exception, in that the auxiliary *-aq* can incorporate a subject.
i.   ʔačaqḥ kaapap John
        ʔača -aq -ḥ   kaapap John
        who -AUX -3INT like   John
        'Who likes John?'   (2001:130)

2.3.5 Passive

Since one form of the possessive morpheme *-uk/-(ʔ)ak/-ʔat* is formally identical to the passive morpheme *-ʔat*, and since the process of possessor raising interacts with passivization, a brief discussion of the "passive" morpheme is in order[20]. The exact nature of *-ʔat* and its cross-Wakashan cognates has been much debated in previous literature (Rose and Carlson 1984, Whistler 1985, Emanatian 1988, Kim 2000, Nakayama 1997b and 2001, Davidson 2002, among others). This morpheme exhibits behaviour typical of both active-passive voice systems (Emanatian 1988, Kim 2000) and direct-inverse systems (Whistler 1985) and in so doing has called into question the validity of either set of labels as a cross-linguistic primitive.

I follow Davidson (2002:309) in the belief that the label used for *-ʔat* is not so vital (to this thesis) as an accurate categorization of its properties. Emanatian (1988) provides a useful list of these. Within her account, those properties of *-ʔat* falling under a "passive" definition include:

1. morphologically or periphrastically marking a transitive verb
2. the predicate's undergoer argument [the theme or patient] appears as subject of the so-marked verb
3. the predicate's actor argument [the agent or effector] either appears as an adjunct (peripheral argument) of the verb, or is omitted entirely.

In contrast, sensitivity to an animacy hierarchy (Klokeid 1978, see 2.3.6) in determining the presence or absence of *-ʔat* is a well-known property of inverse systems. Emanatian (1988:282) suggests that the animacy hierarchy may be a separate requirement within the language, and not inherently analyzable as part of the *-ʔat* construction. She cites evidence from Bantu languages, Coast Salish languages, and English to support this hypothesis. Woo (in prep) furthermore shows evidence of animacy hierarchy effects in unrelated NCN constructions. Finally, Kim (2000) offers a syntactic analysis that accounts for the *-ʔat* construction as a full passive, whereby the animacy hierarchy effects are epiphenomenal to a proposed 3rd person feature associated with *-ʔat*.

Because the aspects of this construction relevant to this thesis are those that fall under a passive analysis, I will continue to gloss this morpheme as passive (PASS) with the understanding that this label is still controversial (c.f. Nakayama 1997b, 2001).

2.3.6 Animacy hierarchy

Southern Wakashan languages generally adhere to a person/animacy hierarchy (Jacobsen 1973 on Makah, Klokeid 1978 on Ditidaht, Whistler 1985 on NCN, among others). Termed a Chain-of-Being hierarchy by Klokeid (1978), the hierarchy embodies the following ranking: speaker/listener > other persons > animals > animate > inanimates.

The person hierarchy is most often discussed in relation to the morpheme *-ʔat* (glossed passive herein). Despite the truth-conditional equivalence of
-ʔat marked (passive) and active forms, the use of one or the other in a given context is determined by the following constraints:

---

[20] Section 3.1.2 illustrates *-ʔat* in its separate role as an inalienable possession marker.

(27)   *Person constraints on presence of -ʔat*

Agent/effector	Theme/patient	status of –*ʔat*
3	1/2	obligatory
1/2	1/2/3	prohibited
3	3	optional

<div align="right">(Whistler 1985, Kim 2000)</div>

Rose and Carlson (1984) offer counter-examples to the chart above, in that –*ʔat* occurs in contexts where it is predicted to be prohibited and fails to occur where it is predicted to be obligatory. Although such instances are rare, I follow Emanatian (1988) and Woo (in prep) in assuming that the person/animacy hierarchy is the result of a preference in NCN, and not a strict rule (contra Klokeid 1978).

2.4   The DP

The range of potential clitics on DPs is less extensive than for clauses, although these also appear in a strictly fixed order. These include at least the possessive, past tense, and determiner (Werle 2002).

(28)   -POSS-PST-DET

(29)   ńaatsiiciƛitsiš maḥ**t̓iimit?i**
ńaatsii–šiƛ –mit –siš   maḥt̓ii-**mit-?i**
see   -PERF-PST-1S.IND house   **-PST-DET**
'I saw a former house (that burnt to the ground).'/'I saw what used to be a house.'

(29)   ʔuʔutuɬitsiš naniiqs**akitqs**
ʔu –ʔu –tuɬ   –mit –siš   naniiqsu   **-ʔak –mit-qs**
R -∅ -dream -PST -1S.IND grandparent-**POSS-PST-1S**
'I dreamed about my late grandparent.'

As with clauses, inflectional morphemes suffix to the leftmost constituent of a given DP. Any modifiers within the phrase precede the head noun. As described by Rose, "the inflection refers to the nominal upon which the nominal phrase is based." (1981:39).

(30)   a.   kuukuḥẇisa**?i**   b.   ʔučknaḥʔis**?i** kuukuḥẇisa
kuukuḥẇisa-**?i**   ʔunaḥ–<čk>-ʔis -**?i**   kuukuḥẇisa
hair.seal   **-DET**   size -DIM -DIM-**DET** hair.seal
'the hair seal'   'the small hair seal'

<div align="right">(Nakayama 2001:78)</div>

(31)   a.   ḥaakʷaaƛ**?i**   b.   ƛuɬaqak**?i** ḥaakʷaaƛ
ḥaakʷaaƛ-**?i**   ƛuɬ -aq -ak -**?i** ḥaakʷaaƛ
girl   **-DET**   good-very-DUR-**DET** girl
'the girl'   'the very beautiful girl'

<div align="right">(Nakayama 2001:78)</div>

2.4.1 DP structure

The structure adopted for the nominal domain herein mirrors that of the clausal domain (2.3.1): Specifiers are right-branching and cliticization is assumed to be prosodic.

(32)

```
                              DP
               D'
        DET            TP
                 T'
        T              nP
              n'
                          [referential variable]
                      NP
              N'
                      NP
        N
```
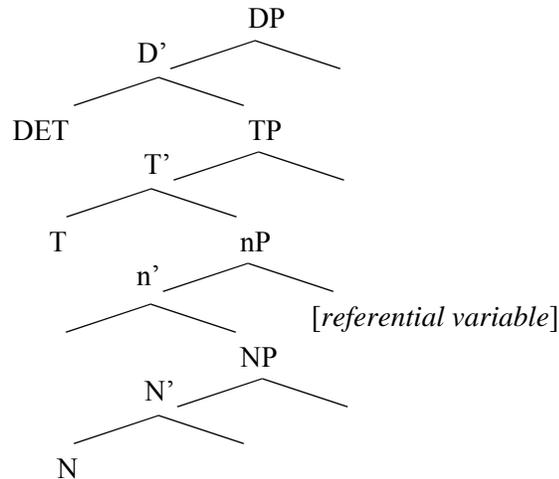
As will be discussed further in sections 2.5 and 2.6, the N in this structure can serve as either as the head of a nominal predicate or as the lexical head of an argument DP. I propose, following Higginbotham (1985) and Grimshaw (1990), that in predicative cases a subject is introduced in Spec, nP, while in non-predicative cases this position hosts a referential variable that is bound by a D.

Where a nominal head is modified, cliticization interacts with the modifier (c.f. Braithwaite's 2003 DP structure).

(33)

```
                    DP                      ʔučknaḥʔisʔi kuukuḥẇisa
         D'                                 ʔunaḥ-<čk>-ʔis-ʔi kuukuḥẇisa
                                            size-DIM-DIM-DET  hair.seal
    Det          nP                         'the small hair seal'      Nakayama (2001:78)
    -ʔi    n'
                       [referential variable]
                 NP
         AdjP         NP
       ʔučknaḥʔis    kuukuḥẇisa
         small        hair seal
```
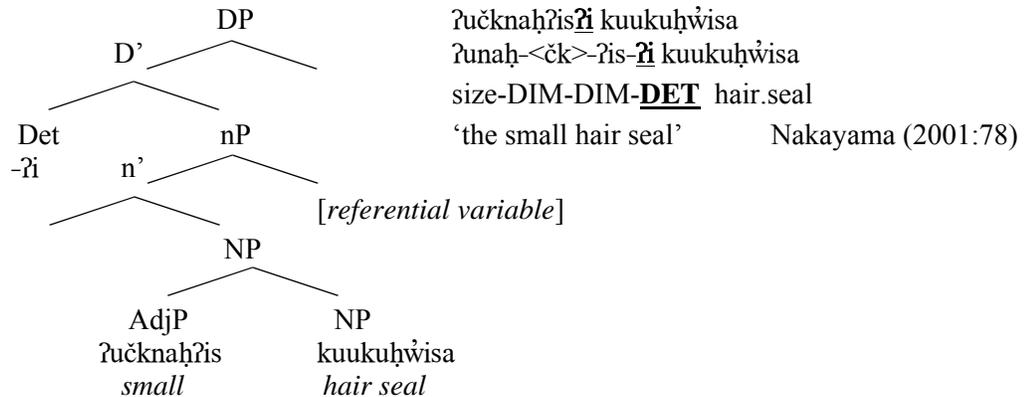
2.4.2 The "determiner" -ʔi

The properties and distribution of the clitic –ʔi in NCN are not fully understood. Sapir (1924), Swadesh (1948), and Rose (1981) refer to it as some form of definite marker. However, it does not consistently indicate definiteness. The morpheme –ʔi is

often optional, and it is prohibited from appearing on more than one argument of a clause simultaneously.

(34) a. ʔuʔiicʔiš maamaati piišpiš
          ʔu -ʔiic   -ʔiš   maamaati piišpiš
          ∅ -consume -3IND bird   cat
          'The bird is eating the cat.'

      b. ʔuʔiicʔiš maamaatiʔi piišpiš
          ʔu -ʔiic   -ʔiš   maamaati-**ʔi**   piišpiš
          ∅ -consume -3IND bird   **-DET**   cat
          'The bird is eating the cat.'

      c. ʔuʔiicʔiš maamaati piišpišʔi
          ʔu -ʔiic   -ʔiš   maamaati piišpiš-**ʔi**
          ∅ -consume -3IND bird   cat   **-DET**
          'The cat is eating the bird.'

      d. * ʔuʔiicʔiš maamaatiʔi piišpišʔi
          ʔu -ʔiic   -ʔiš   maamaati-**ʔi**   piišpiš-**ʔi**
          ∅ -consume -3IND bird   **-DET** cat   **-DET**

Alternatively, Davidson (2002) argues that all arguments are structurally headless relative clauses, and that *-ʔi* is a "nominalizing" relative mood that attaches to them. In part, evidence he cites to support this includes the complementary distribution between *-ʔi* and other moods: since all mood-markers (with the occasional exception of the quotative) are in complementary distribution, this would follow if *-ʔi* were a mood.

(35) a. ✓ ḥaẁiɫ-**ʔiš**   John   *Mood alone*
          chief -**3IND** John
          'John is a chief.'

      b. * ḥaẁiɫ-**ʔi** -**ʔiš** John   *Mood and determiner*
          chief –**DET-3IND** John
          *'John is the chief.'

      c. * ḥaẁiɫ-**ʔiš** -**ʔi** John
          chief -**3IND-DET** John
          *'John is the chief.'

(36) a. * tiiča -**ʔi** –**siš**   b. * tiiča-**siš-ʔi**
          teacher-**DET -1S.IND**   teacher-**1S.IND-DET**
          *'I am the teacher.'   * 'I am the teacher.'

In addition, Davidson points out that the distribution of *-ʔi* is subject to topicality or communicative importance, concluding that "Further study of how [*-ʔi*] is used in discourse is the only sure way of making progress on these questions." (2002:299).

As Davidson further reports, the morpheme -ʔi is also obligatory on elements in argument position that are not headed by a noun or quantifier (see also Jacobsen (1979) on Makah). These are discussed briefly in 2.5.

2.5 Category flexibility of predicates and arguments

One of the best-known claims about Nuu-chah-nulth is that the language lacks lexical category distinctions (Swadesh 1939). This idea has been contested by a number of authors, and I refer the reader to Jacobsen (1979), Nakayama (2001) and Wojdak (2001) for more in-depth discussion.

Although I follow the above authors that NCN distinguishes lexical categories, there is wide flexibility between predicative and argumental use of open-class roots (that is, nouns verbs, adjectives, and adverbs).

(37) *verbal predicate, nominal argument:*

mamuukʔiš čakupʔi
mamuuk-ʔiš   **čakup**-ʔi
work -3IND   **man**-DET
'The man is working.'   (Wojdak 2001:1)

(38) *adjectival predicate, verbal argument:*

hiixʷaṭḥiʔiš mamuukʔi
hiixʷaṭḥi-ʔiš   **mamuuk**-ʔi
cranky-3IND **work** -DET
'The working (one) is cranky.'   (Wojdak 2001:1)

(39) *nominal predicate, adjectival argument:*

čakupʔiš hiixʷaṭḥiʔi
čakup-ʔiš   **hiixʷaṭḥi**-ʔi
man -3IND **cranky** -DET
'The cranky (one) is a man.'   (Wojdak 2001:1)

Of relevance here is the fact that both nominal and verbal stems can take tense and mood clitics and serve as the main predicate of a clause (2.6).

2.6 Nominal predicates

The nominal predicate construction is roughly equivalent to the English copula plus NP construction in meaning: it denotes class-inclusion or equation (Davidson 2002:126).

(40) ḥawiɫʔiš John
ḥawiɫ-ʔiš   John
chief -3IND John
'John is a chief.'

(41)   ʕiniiƛʔiš
       ʕiniiƛ-ʔiš
       dog -3IND
       'It is a dog.' (Context: through binoculars)

Note that the predicates in these examples are NPs, not DPs; determiners do not co-occur with clausal morphology in NCN (Wojdak 2001, see 2.4.2, 3.5 and 3.6), hence DP-marked nominals as described in (2.5) are found only as arguments.

(42)   a.   * ḥaẇiƛʔiʔiš John   b.   * ḥaẇiƛʔišʔi John
             ḥaẇiƛ-ʔi -ʔiš   John   ḥaẇiƛ-ʔiš -ʔi John
             chief -DET-3IND John   chief -3IND-DET John
             * 'John is a chief.'   * 'John is a chief.'

(43)   a.   * ʕiniiƛʔiʔiš   b.   * ʕiniiƛʔišʔi
             ʕiniiƛ -ʔi   -ʔiš   ʕiniiƛ-ʔiš   -ʔi
             dog   -DET -3IND   dog   -DET -3IND
             * 'It is a dog.'   * 'It is a dog.'

        Nominal predicate structure differs from verbal predicate structure in that there is no VP present. In example (44) "*ḥaẇiƛ-ʔiš John*," (*John is a chief*) below, the N "*ḥaẇiƛ*" (*chief*), is the predicate. This merges with available clausal clitics just as a verb does. Likewise, the subject DP raises to Spec, MoodP to determine subject-agreement. I assume that the underlying subject position in the case of a predicate nominal is Spec, nP.

(44)

       ḥaẇiƛ-ʔiš   John
       chief-3IND   John
       'John is a chief.'

2.7   Independent pronouns

Besides agreement clitics, Nuu-chah-nulth also uses first and second person overt independent (or "strong") pronouns.

(45)   *Ahousaht independent pronouns*

	Singular	**Plural**
1	siẏa	niiẇa
2	suẇa	siiẇa

These may serve as objects (46-47), or may double subject agreement with an emphatic interpretation (48a-b).

(46)   wiiʕaqƛstumitʔick siẏa
        wik –ʔaqƛ –stup –mit –ʔick   siẏa
        NEG -inside -thing -PST -2S.IND 1S
        'You made me unhappy.'   (Ling 431 database 2003)

(47)   qaaciimitsiš suẇa ƛuḥċiti
        qaacii -mit –siš   suẇa   ƛuḥċiti
        give -PST -1S.IND 2S   head(s)
        'I gave[21] (to).you (fish) heads.'

(48)   a.   tiičaʔiš John   b.   tiičasiš siẏa
              tiiča-ʔiš   John   tiiča -siš   siẏa
              teacher-3IND John   teacher-1S.IND 1S
              'John is a teacher.'   'Me, I'm a teacher.'

However, these cannot necessarily replace an argument DP, as shown in (49).

(49)   a.   ʔuucʔiiš č̓apac John
              ʔu-iic   -ʔiš   č̓apac John
              ∅-belong -3IND canoe John
              'The canoe belongs to John.'

        b.   * ʔuucʔiiš č̓apac siẏa
                ʔu –iic   -ʔiš   č̓apac siẏa
                ∅ -belong -3IND canoe   1S
                * The canoe belongs to me.

Most often these independent pronouns appear incorporated into a predicate.

(50)   siẏaaʔaqƛwaʔičas waɬaak
        siẏaa –ʔaqƛ –waʔičas   waɬaak
        1S   -TEMP -1S.QUOT   to.go
        'It's me that has to go.'

---

[21] The predicate *qaac* means "give" in the sense of giving food. (For instance a sweater (as a gift) would use ṅaḥii).

(51) siẏaasiš čʼapac
       siẏa –aas   –siš   čʼapac
       1S   -belong -1S.IND   canoe
       'It's my canoe.' / 'That's my canoe.'

2.8   Conclusion

In this chapter I have laid out my assumptions about basic NCN morphosyntax. In particular, I assume that morphological merger at PF is responsible for a fixed clitic sequence that attaches to both clausal and nominal heads or their modifiers. Subject agreement of both verbal and nominal predicates is structurally determined, whereby the subject DP undergoes movement to Spec, MoodP, and Mood is a portmanteau Mood and Agreement morpheme in contemporary NCN. Empirical evidence suggests broad parallels between the clausal and DP domains.

Unmarked word order is assumed to be predicate initial in line with previous studies, and I assume a clausal structure that provides for underlying VOS order.

I have also provided descriptions of several other phenomena which will be pertinent to the main topic of my thesis, including general descriptions of the nature and distribution of the morphemes *–ʔat* and *–ʔi*, noun incorporation, and overt pronouns. Despite great flexibility between categories, I assume that nouns and verbs are primitives in NCN.

3 Possession

This chapter contains an overview of the core properties of possessive DPs and nominal predicates in NCN, and lays out the structural assumptions which I employ to analyze them. First, the possessive clitic is introduced (3.1), and the distinction between alienable (3.1.1) and inalienable (3.1.2) possession is discussed. Data on independent possessive pronouns are given in section 3.2. Issues of word order and syntactic constituency within possessive DPs are discussed in section 3.3, and I propose a structure for possessive DPs in 3.4. I then refine this structure, employing data from possessive agreement (3.4.1) and adjectival modification of the possessum (3.4.1.4). I conclude with a description of possessed nominal predicates and their structure in 3.5.

3.1 The possessive clitic: (in)alienable distinction

In Nuu-chah-nulth possessive DPs the clitic *-uk /-(ʔ)ak̓*, denoting alienable possession (52a-b), or *-ʔat*, denoting inalienable possession (53a-b), attaches to the possessum and is followed by person and number agreement matching the possessor.

(52)	a.	šuwis-**uk**-qs	b.	sapnii-**ʔak̓**-qs
		shoe(s)-**POSS**-1S		bread -**POSS**-1S
		'my shoes'		'my bread'

(53)	a.	ɬimaqstatqs	b.	nič̓aatqs
		ɬimaqsti-**ʔat**-qs		nič̓a-**ʔat**-qs
		thoughts-**INAL**-1S		nose-**INAL** -1S
		'my thoughts/mind'		'my nose'

       Rose (1981:234) notes for the Kyuquot dialect that when possession of a body part is indicated, "-*ʔat* can always be replaced by -*uk̓*". Davidson (2002:314) observes from Tseshaht texts that -*ʔat* can "optionally replace the possessive clitic" *-uk/-(ʔ)ak* to show inalienable possession. Both Rose and Davidson illustrate this using a single one-word example and provide no context: Rose gives "*ƛišƛin-k̓ʷ*" and "*ƛišƛin-ʔat*" for "*his foot*", and Davidson gives "*t̓uḥcit-ak̓ʔi*" and "*t̓uḥcit-ʔatʔi*" for "*his/her/its/their head(s)*".While it is true that examples of body parts marked by *-uk/-(ʔ)ak* do appear in Tseshaht data (Sapir and Swadesh 1939), there is some evidence that alienable marking *-uk/-(ʔ)ak* does not alternate freely with inalienable -*ʔat* without a supporting context. Braithwaite (2003:9) contrasts examples of "his head" from Tseshaht texts, marked with *-uk/-(ʔ)ak* in one case and -*ʔat* in the other. In the case marked with -*(ʔ)ak* (alienable) the head has been cut off from its original owner and is in the possession of someone else. The Ahousaht consultants I worked with consistently rejected instances of alienably-marked body parts, even in the expected context of fish heads (as a food) or eagle wings (as a wand held by a lead singer).

(54)	a.	č̓iʔatamitwaʔiš Vincent p̓ap̓ii<u>**ʔat**</u>ʔi
		či - ʔatap - mit -waʔiš Vincent p̓ap̓ii <u>**-ʔat**</u> -ʔi
		cut-away.from-PST -3QUOT Vincent ear- <u>**INAL**</u>-3
		'Vincent [van Gogh] cut his (own) ear off.'

b. * čiʔatamitwaʔiš Vincent p̓ap̓iiʔakʔi
       či - ʔatap   – mit -waʔiš   Vincent p̓ap̓ii –ʔak –ʔi
       cut-away.from-PST -3QUOT Vincent   ear- **POSS**-3

(55)   čiʔatap̓atukʔiš p̓ap̓iiʔatʔi Vincent John
       či –ʔatap   –ʔat –uk   –ʔiš   p̓ap̓ii-ʔat-ʔi Vincent John
       cut -away.from-INAL-POSS-3IND   ear-INAL-3 Vincent John
       'John cut Vincent's ear off.'

When I tried to read (56) back to Katherine Fraser, I said *-ak* by accident where she had
said *-ʔat*. She wouldn't let me finish the sentence that way:

(56)   CR: "čiʔatapʔatukʔiš p̓ap̓iiʔakʔi..."
       KF: (interrupting): "No, ʔat."
       CR: "p̓ap̓iiʔakʔi..."
       KF: (interrupting): "ʔat."
       CR: "You can't say *p̓ap̓iiʔakʔi*?"
       KF: "No."

From this I conclude that these morphemes are not freely interchangeable, but rather have
different meanings which are appropriate in different contexts (as has also been suggested
by Braithwaite 2003:8-9). The degree to which a body part must be alienated from the
whole in order to license alienable marking may vary between the NCN dialects,
however.

3.1.1   Alienable possession

The clitic *-uk /-(ʔ)ak* is used to mark alienable possession in NCN, attached to the
possessum together with an agreement clitic matching the person and number of the
possessor. The *-uk* allomorph follows consonants (57a) while *-(ʔ)ak* follows vowels
(57b). Henceforth I will refer to either version of this morpheme simply as the possessive
morpheme (POSS).

(57)   a.   ʔuušẖy̓umsukʔi Sam
               ʔuušẖy̓ums-**uk**   –ʔi Sam
               friend   -**POSS** -3   Sam
               'Sam's friend'

       b.   tiičaakʔi   Sam
               tiič**a** –**ʔak** –ʔi Sam
               teacher-**POSS** -3   Sam
               'Sam's teacher'

3.1.1.1   Alienable possession versus the durative marker

The alienable POSS is usually homophonous with the durative morpheme

-(ʔ)uk/-(ʔ)ak. However, these morphemes are distinct, showing different morphological and phonological patterns. Specifically, the possessive and the durative morphemes (i) have different patterns of allmomorphy and (ii) fall into different morphological clitic-ordering slots.

Distribution of the two alienable POSS alternates is phonologically determined: *-uk* follows consonants and *-(ʔ)ak* follows vowels.

(58) *Possessive: -uk follows consonants:*

       a.   šuwis-**uk**-qs   - 'my shoe(s)'   b.   čʾapac-**uk**-ʔi   John - 'John's canoe'
              shoe(s)-**POSS**-1S   canoe-**POSS**-3 John

(59) *Possessive: -ʔak follows vowels:*

       a.   sapnii-**ʔak**-qs - 'my bread'   b.   maḥtʾii-**ʔak**-ʔi Rachel - 'Rachel's house'
              bread -**POSS**-1S   house-**POSS**-3 Rachel

Note that subsequent phonologically conditioned deletion can lead to the surface appearance of possessive *-ak* after consonants.

(60) ńuẃiiq**s** - **ak**-ʔi   - 'his father'
      ńuẃiiqs**u** -**ʔak**   -ʔi
      father   **-POSS -**3

In contrast, the durative suffix *-(ʔ)uk/-(ʔ)ak* has a number of phonologically unpredictable allomorphs. Davidson (2002:232) notes that each root or suffix that may occur attached to the durative can only occur with one fixed form of the allomorph.

(61) *Durative: Both -(ʔ)uk and -(ʔ)ak follow consonants:*

       a.   wiikʕaƛ-**uk**-ʔiš -'S/He is quiet.'   b.   ʔucq-**ak**   -'foggy'
              quiet-**DUR**-3IND   fog-**DUR**

       c.   ƛʾiḥ-**uk** -red   -'red'   d.   qaḥ-**ak**   -'dead'
              red-**DUR**   die-**DUR**

(62) *Durative: Both -(ʔ)uk and -(ʔ)ak follow vowels:*

       a.   kʷaa-**ʔuk**   -'to move backwards'   b.   wi-**ʔak**   -'stubborn'
              back-DUR   stubborn-DUR

       c.   ha-**ʔuk**   -'to eat'   d.   ya-**ʔak**   -'ache/love'
              food-DUR   ache-DUR

In addition to distributional differences, the possessive and the durative are shown in the following minimal pair with different meanings.

(63) a. **witq-ak**-ʔiš   b. **witq-uk**-ʔiš
          ugly-**DUR**   ugly-**POSS**-3IND
          'It is ugly/poorly made.'   'His/hers is ugly/poorly made.'

The possessive and the durative morphemes can both appear attached to a predicate. Where these morphemes co-occur it is clear that they fall into different morphological slots (2.3), as they can be separated by other morphemes. The durative appears within the inner shell of derivational suffixes, while the possessive sits in the outer shell of inflectional clitics (per Davidson's categorization, 2002:92-93).

(64) witq**akuk**-ʔiš ɬiḥaɬ
      witq -**ak -uk** -ʔiš   ɬiḥaɬ
      ugly -**DUR-POSS**-3IND   mat
      'His/her mat is ugly.'

(65) ʔucq**akuk**ʔicuuš
      ʔucq -**ak -uk** -ʔicuuš
      fog -**DUR-POSS** -2PL.IND
      'Your place is foggy.'

(66) m̓uʔakʷaʔap̓atuks sapnii ʔuušḥy̓umsukqs
      m̓uʔ-**ʔak** -kʷa -ʔap -ʔat -**uk** -siš   sapnii ʔuušḥy̓ums-uk -qs
      burn-**DUR** -break- CAUS-PASS-**POSS**-1S.IND bread friend   -POSS.1S
      'My bread was burned by my friend.'

Further evidence for the categorization of possessive *-uk* as a clitic comes from the modified possessum, where POSS plus agreement morphemes attach to the left-most element of a complex possessum. This clearly illustrates the enclitic, as opposed to suffix, status of the possessive morphology (section 2.3).

(67) ʔuʔusumʔiš Christine ʔiḥ**aqaquk**ʔi   ƛ̓iḥumɬ ƛ̓iʔičumɬ Florence
       ʔu -ʔusum-ʔiš   Christine ʔiḥ-**aqaq-uk** -ʔi   ƛ̓iḥumɬ ƛ̓iʔičumɬ Florence
      ∅ - want- 3IND Christine **big-very-POSS-3**   red   hat   Florence
      'Christine wants Florence's big red (straw) hat.'

These data show that the phonological resemblance between the possessive and durative morphemes is merely an issue of homophony.

3.1.1.2 Alienable possessive relationships

The semantic relationships encoded by grammatical possession vary across languages quite extensively, ranging from from a sense of control to mere spatial proximity or a vague sense of association (Heine, 1997). Several of the relations denoted by Nuu-chah-nulth alienable possession have been described in previous literature. Rose (1981: 235) lists for Kyuquot legal or social ownership, social relationships, and "physical adjacency or association". These are also found in the Ahousaht dialect (illustrated in (68)-(70), respectively) although Ahousaht speakers do not accept all

instances of the latter type. Example (70) is the only instance of physical association accepted by my two principal consultants.

(68) a. ʔuyuʔaaɬʔiš hupkumɬ ʕiniiƛukqs
    ʔu-yuʔaaɬ-ʔiš   hupkumɬ   ʕiniiƛ-uk-qs
    ∅- find -3IND ball   dog-POSS-1S
    'My dog found a ball.'   (R. Wojdak, p.c.)

  b. ʔiḥaqaqukʔi   ƛ̓iʔičumɬ Florence
    ʔiḥ -aqaq-uk -ʔi   ƛ̓iʔičumɬ Florence
    big-very -POSS-3 (straw) hat   Florence
    'Florence's big hat'

(69) a. ḥaw̓iɬukʔiš ʔaaḥuusʔatḥ
    ḥaw̓iɬ-uk -ʔiš   ʔaaḥuusʔatḥ
    chief-POSS-3IND   Ahousaht
    'He is the Ahousaht's chief.'

  b. y̓ukʷiiqsakniš   Ken
    y̓ukʷiiqs   -ak -niš   Ken
    younger.sibling-POSS-1PL.IND   Ken
    'Ken is our brother.'

(70) ʔuukʷiɬči ċumiiɬ šuʔuɬukʔi čaakupiiḥ
    ʔuu-kʷiɬ-či   ċum -iiɬ   šuʔuɬ-uk -ʔi čaakup-iiḥ
    ∅-do.to-2S.IMPR   wash -floor   toilet -POSS-3   man   -PL
    'Go mop the men's washroom [floor].'
    Context: janitors at a highway rest area; no one actually owns the washroom.

    Davidson (2002) additionally notes a locative relation for Tseshaht, such as "center of the house" and "top of the tree," that was rejected as uninterpretable by my Ahousaht consultants.
    In addition to these I have recorded an agentive relationship whereby the possessor is the creator.

(71) witqukʔiš č̓apac
    witq-uk   -ʔiš   č̓apac
    ugly-POSS-3IND canoe
    'Her/His canoe [that s/he made] is poor work.'
    Context: a model-canoe building contest

(72) yaaqʔiiš w̓anušukʔitk   (c.f. Rose 1981:237)
    yaaq-ʔiš   w̓anuš-uk-ʔitk
    long-3IND skirt-POSS-2S
    'Your skirt [that you are making] is long.' (Context: in a sewing class)

Thus alienable possession can be interpreted quite broadly in NCN, with only a locative possessive reading completely absent in the Ahousaht dialect.

3.1.2 Inalienable possession

The morpheme -ʔat has received much attention in the literature in its clausal guise as a 'passive' marker (Rose and Carlson 1984, Whistler 1985, Emanatian 1988, Kim 2000, Nakayama 1997b and 2001, and Davidson 2002 among others; section 2.3.5), but an analysis of its function as an inalienable possessive marker has been largely left aside. A passive analysis of -ʔat may be compatible with inalienable possession in that inalienables have an inherent possessor, which like the internal argument of a verb could be promoted to an external position of the possessed noun, such as would normally be held by an alienable possessor. However, such an account is unable to explain why relational nouns should then have the same distribution and behaviour as other types of possession. Like inalienables, relational nouns have an inherent possessor, but these differ from inalienables in that they are marked with the alienable possessive -uk/-ʔak. (See Appendix II for further discussion.) I will therefore assume for the purposes of this thesis that passive -ʔat and inalienable -ʔat are separate morphemes, though I do not rule out the possibility that a unified account may eventually be forthcoming.

3.1.2.1 Inalienable possessive relationships

As an inalienable possessive marker, the morpheme -ʔat represents a possessive relation to body parts[22] (Rose 1981, Davidson 2002) as well as to ideas, thoughts, and sometimes dreams or hopes.

(73) a   niča   - 'nose'   b.   ńičaatqs   - 'my nose'
           niča   niča-ʔat-qs
           nose   nose-**INAL**-1S

(74)   hiɬaasʔiš Olga qacaasʔatqs
        hiɬ - aas   -ʔis   Olga qa - caas - ʔat -qs
        LOC-on.surface-3IND Olga left-side - **INAL**-1S
        'Olga is sitting to my left side.'   (O. Steriopolo, p.c.)

(75)   ƛu-ya-čiƛ-ʔiš ɬimaqstatqin
        ƛuɬ -ya -šiƛ -ʔiš ɬimaqsti   -ʔat -qin
        good-CONT-PERF -3IND thoughts/mind-**INAL**-1PL
        'We are happy, we are feeling good.' (Lit.- 'Our thoughts are [now] good.')

---

[22] Body parts are often expressed as lexical suffixes (2.2) attached to the predicate. In this alternate form they do not take additional affixation, which is expected as they are not independent arguments, but predicate modifiers.
i.   ṁaṁaaqaɬḥiʔanitʔiš Mary ʕiniiƛʔi
        ṁa-ṁa -qaɬḥi -ʔat -mit -ʔiš   Mary ʕiniiƛ -ʔi
        R -bite -leg -PASS -PST -3IND Mary dog   -DET
        'Mary was bitten on the leg by a dog.'

Inalienability in NCN therefore extends beyond body parts proper, contra previous accounts (c.f. also Braithwaite's (2003) suggestion that possessive -ʔat represents a part-whole relationship).

3.2 Possessive pronouns

First and second person independent pronouns (2.7) can combine with the incorporating predicate -aas (*to belong to*) to create a set of independent possesive pronouns, given in (76). Unfortunately, this construction is not well-understood. Possessive pronouns are somewhat challenging to elicit in a non-discourse setting, and my attempts to describe their nature or distribution made little headway. Expressions containing possessive pronouns are furthermore uncommon in texts (Davidson 2002:341), and so a thorough investigation of their use has yet to be completed.

(76)   *Ahousaht possessive pronouns*

	Singular	**Plural**
1	siẏaas	niiẇaas
2	suẇaas	siiẇaas

Possessive pronouns can stand alone in the context of an answer to a question:

(77)   Q: ʔačiiċ ʔaḥkuu ʕiniiƛ(ʔi)
            ʔač -iic -ḥ   ʔaḥ -kuu   ʕiniiƛ(-ʔi)
            who -own -3INT this-nearby dog (-DET)
            'To whom does that dog belong?'

       A: siẏaas
            siẏa-aas
            1S -belong
            'It belongs to me.'

More often, they appear as nominal predicates (2.6):

(78)   **suẇaas**iči ʔaƛ ʔick hupkuumɬukqs
       suẇaa -aas   -iičiƛ -ʔaƛ -ʔick   hupkuumɬ-uk -qs
       2S   -belong-INCEP-TEMP-2S.IND ball   -POSS-1S
       'My ball is yours now.' ('My (toy) ball belongs to you now.')

(79)   **siẏaas**iš čʼapac
       siẏa-aas   -siš   čʼapac
       1S -belong-1S.IND canoe
       'It's my canoe.' / 'That's my canoe.'

Independent possessive pronouns also often appear as part of a complex nominal predicate:

(80)   ʔuušḥy̓umsʔick **siy̓aas**
       ʔuušḥy̓ums-ʔick   siy̓a-aas
       relative   -2S.IND   1S-belong
       'You are my friend/relative.'

(81)   y̓ukʷiiqsuʔiš **niiw̓aas**
       y̓ukʷiiqsu   -ʔiš   niiw̓a-aas
       younger.sib-3IND 1PL   -belong
       'S/he is a younger sibling of ours.'

Finally, there are a few examples of a possessive pronoun occurring inside a DP:

(82)   wik̓atukʷits kuuw̓it(ʔat) **siy̓aasʔi** č̓apac
       wik -ʔat -uk -mit -siš   kuuw̓it (-ʔat)   siy̓a-aas   -ʔi   č̓apac
       NEG -PASS -POSS -PST -1S.IND   steal   (-PASS)   1S -belong-DET canoe
       'It wasn't my canoe that got stolen.' [It was someone else's.]

(83)   ʔukʷiqsʔax̌ukuusḥsuk **siy̓aasʔi** kuunaa p̓atquk...
       ʔu   -či-ʔaḥs   -ʔax̌ -uk -(w)uus-ḥ   -suk   siy̓a-aas   -ʔi
       so.and.so-at-in.a.vessel-TEMP-POSS-DUB   -SUBOR-2S   1S-belong-DET
                                                       kuunaa   p̓atq   -uk ...
                                                       schooner goods-DUR
       'Your goods would be carried in my schooner, ...'
                                        (Sapir and Swadesh 1939:144.34-35)[23]

3.3   Possessive DPs: word order and constituency

NCN possessive clitics attach to the first word of a possessive phrase (2.4), in which the basic word order is possessum (PSM), followed by a DP possessor (PSR) when the PSR is overt (Rose 1981, Davidson 2002, Braithwaite 2003).

(84) a. maḥt̓ii   b. maḥt̓ii-**ʔak**-ʔi Rachel   c. čušuk-**uk**-ʔi maḥt̓ii Rachel
       house   house-**POSS**-3 Rachel   new-**POSS**-3 house Rachel
       'house'   'Rachel's house'   'Rachel's new house'

Where ambiguity in meaning is possible, PSM-PSR is the only order allowable. Example (85) shows ambiguity between the PSM and PSR, while (86) shows a "garden path" type ambiguity between a transitive and intransitive reading of the predicate.

(85)   a.   ṅaatsiičix̌itsiš ṅuw̓iiqsakʔi ʔuušḥy̓umsukʔi Sam
              ṅaatsii-šix̌ -mit-siš   ṅuw̓iiqs –ak -ʔi ʔuušḥy̓ums –uk -ʔi Sam
              see   -PERF-PST-1S.IND father   -POSS-3 friend   -POSS -3 Sam
              'I saw Sam's friend/relative's[24] father.' (* 'I saw Sam's father's relative.')

---

[23] As cited in Davidson (2002:341).

[24] The alternate glosses for this term are due to a generational difference: the older generation tend to accept only "relative" while the younger generation extend the meaning to "friend."

b. ńaatsiičiƛit-siš ʔuušḥy̓umsukʔi ńuw̓iiqsakʔi Sam
ńaatsii-šiƛ -mit-siš ʔuušḥy̓ums -uk -ʔi ńuw̓iiqs -ak -ʔi Sam
see -PERF-PST-1S.IND friend -POSS -3 father -POSS-3 Sam
'I saw Sam's <u>father's friend/relative</u>.' (* 'I saw Sam's <u>relative's father</u>.')

(86) a. haʔukʔiš ʔuušḥy̓umsukʔi Sam
 haʔuk-ʔiš ʔuušḥy̓ums-uk -ʔi Sam
eat -3IND <u>friend -POSS -3 Sam</u>
'Sam's friend is eating.'

b. haʔukʔiš Sam ʔuušḥy̓umsukʔi
haʔuk -ʔiš Sam ʔuušḥy̓ums-uk -ʔi
eat -3IND <u>Sam relative -POSS -3</u>
'Sam's eating his relative.'   Consultant: "*Sam is a cannibal?*"
unavailable: * 'Sam's friend/relative is eating.'

c. haʔukʔiš ʔuuštaqyuʔi ʔuušḥy̓umsukʔi
haʔuk -ʔiš ʔuuštaqyu-ʔi ʔuušḥy̓ums-uk -ʔi
eat -3IND <u>healer -DET relative -POSS -3</u>
'The doctor is eating his relative.'
unavailable: * 'The doctor's friend/relative is eating.'

However, where the interpretation of PSR and PSM is unambiguous, their relative order is flexible and often varies in conversation[25].

(87) a. čaapacmaʕukʔiš tiičaakʔi John
čaapac-maʕuk -ʔiš tiiča -ʔak -ʔi John
canoe -maker.of -3IND <u>teacher -POSS -3 John</u>
'<u>John's teacher</u> is a canoe-maker.'

b. čaapacmaʕukʔiš John tiičaakʔi
'<u>John's teacher</u> is a canoe-maker.'

(88) a. nunuukqatḥʔiš Rachel ʔuuštaqyakʔi
nu-nuuk-qatḥ -ʔiš Rachel ʔuuštaqyu-ʔak -ʔi
R-sing -claim-3IND Rachel healer -POSS -3
'Rachel's doctor is pretending to sing.'

b. nunuukqatḥʔiš ʔuuštaqyakʔi Rachel
'Rachel's doctor is pretending to sing.'

---

[25] Note that this flexibility is only observed where proper names are involved. Individuals denoted by their job or title often require an unnatural context to take possession. Furthermore, the NCN system of relational terms makes it difficult to establish ambiguous, potentially symmetrical pairs of related individuals.

These data show that the word order of possessor and possessum is not free, but it is flexible.

Although the order of PSR and PSM can be reversed (89a-b), they cannot be separated by another constituent (89c).

(89) a. ʔukʷiiɬmaḥsaʔiš <u>tiičaakʔi Florence</u> čʼapac
          ʔukʷiiɬ-maḥsa-ʔiš   tiiča   -ak -ʔi Florence čʼapac
          make -want -3IND teacher-POSS-3   Florence canoe
          '<u>Florence's teacher</u> wants to make a canoe.'

      b.   ʔukʷiiɬmaḥsaʔiš <u>Florence tiičaakʔi</u> čʼapac

      c. * ʔukʷiiɬmaḥsaʔiš <u>tiičaakʔi</u> čʼapac <u>Florence</u>
          ʔukʷiiɬ-maḥsa-ʔiš   Florence čʼapac tiiča   -ak -ʔi
          make   -want -3IND Florence canoe teacher-POSS -3
          Consultant:
          "This sounds like, "The canoe's teacher wants to make...   hmm.""

      d. * ʔukʷiiɬmaḥsaʔiš <u>Florence</u> čʼapac <u>tiičaakʔi</u>
          ʔukʷiiɬ-maḥsa-ʔiš   Florence čʼapac tiiča   -ak -ʔi
          make   -want -3IND Florence canoe teacher-POSS-3
          * '<u>Florence's teacher</u> wants to make a canoe.'[26]

This shows that PSR and PSM must form a single constituent within DP.

3.4   Possessive DP structure

I propose the syntactic configuration below to account for the Nuu-chah-nulth data described thus far (c.f. Braithwaite 2003).
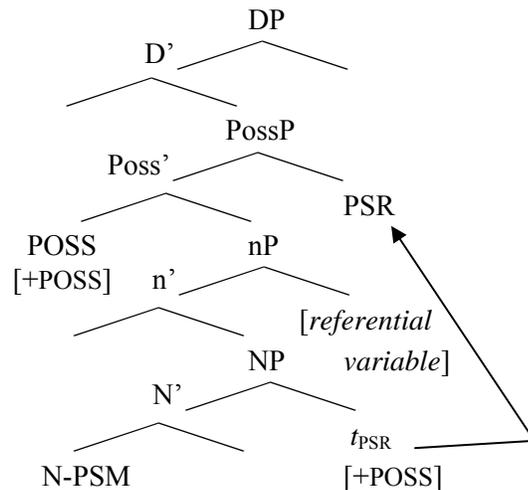
(90)   *Possessive DP structure*

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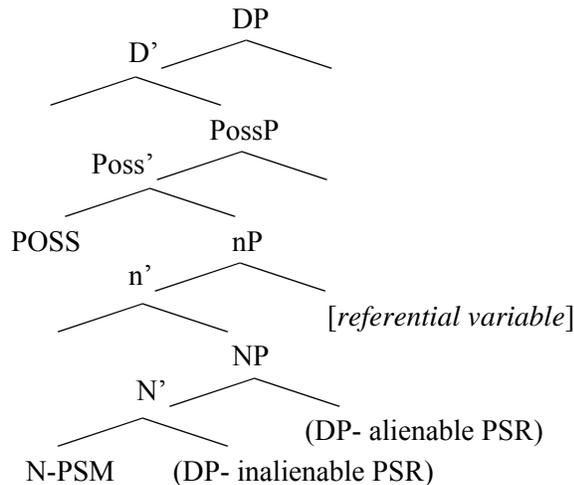
[26] Note that a non-constituent reading is perfectly grammatical for this form, however:
✓ "Florence wants to make a canoe for (her) teacher."

A right-branching specifier model (Wojdak, in prep) generates the unmarked PSM-PSR word order (2.4.1), with the other order generated by optional scrambling of the PSR to a position preceding the PSM.

I posit the existence of a Possessive Phrase (PossP), headed by the possessive clitic. This has a possessive feature which is also generated on the possessor DP. The possessor must raise to Spec, PossP to check the possessive feature; this will be relevant to the discussion of nominal predicates in (3.5) and the possessor raising construction in Chapter 4. For now, PossP serves to mainly to account for the position of the clitic head -uk directly above the possessed NP.

(91)

As will be further illustrated in 3.4.1.1, the determiner and possessive marking do not co-occur. The determiner in the DP structure above is therefore assumed to be null in the presence of POSS.

3.4.1   Possessive agreement

Nuu-chah-nulth possessed arguments are marked with agreement clitics historically derived from components of other mood and person-agreement paradigms (Rose 1981:235, Nakayama 2001:128, Davidson 2002:307)[27]. However, the possessive paradigm cannot be reduced to its original components in contemporary Ahousaht NCN.

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[27] Rose (1981), Nakayama (2001), and Davidson (2002) agree that the relative mood morpheme (which Davidson calls the Definite Relative) follows the possessive clitic where the PSR is first person, and that the subordinate mood morpheme follows the possessive where it is second person. Rose further asserts that third person is marked with absolutive mood, a claim she supports with evidence from the appearance of the Kyuquot past tense allomorph in past possessive constructions. Parallel to the portmanteau mood morphemes appearing on CPs, these are fused with a paradigm of person/number morphemes called a pronominal marker by Rose and Davidson but more neutrally just a suffix by Nakayama. See Rose (p. 235) for diachronic sources of these elements.

I will follow Nakayama (2001:43) who characterizes NCN mood markers as "highly abstract or grammaticized", and treat the possessive paradigm as unanalyzable here [28].

Agreement marking follows the possessive clitic on the possessum and agrees with the person and number of the possessor. (See Appendix I for the complete paradigm.)

(92) t̓ičiƛit?iš Adam m̓uks?i?ak**qs**
     t̓ičiƛ –mit-?iš   Adam m̓uks?i-?ak -**qs**
     throw-PST-3IND Adam rock - POSS-**1S**
     'Adam threw <u>my rock</u>.'

(93) t̓ičiƛit?iš Adam m̓uks?i?ak**?itqsuu**
     t̓ičiƛ –mit –?iš Adam m̓uks?i-?ak -**?itqsuu**
     throw -PST -3IND Adam <u>rock   -POSS</u> -**2PL**
     'Adam threw <u>your-PL rock</u>.'

(94) t̓ičiƛit?iš Adam m̓uks?i?ak**(?i(?aƚ))**
     t̓ičiƛ –mit –?iš   Adam   m̓uks?i -?ak -**(?i-(?aƚ))**
     throw -PST -3IND Adam   <u>rock   -POSS -(3 -(PL))</u>
     'Adam threw <u>their rock</u>.'

Third person agreement as well as plural marking is optional in non-ambiguous contexts. This is true of agreement throughout the language, independent of possession.

Rose defines the types of elements that can take possessive endings consisting of -*uk* and the above agreement paradigm: "These ... are found only in a non-predicative stem: one which is either a nominal, a NP modifier, or an implicitly-derived nominal [i.e., not a "nominalized" element]." (1981: 235) In other words, the possessive paradigm is only used with nouns, thereby providing a further test for noun-hood (c.f. Wojdak 2001). In the case of possessed nominal predicates (2.6, 3.5), possessive agreement with the person and number of the possessor is marked by one of the ordinary predicative agreement series (2.3.2):

---

[28] Interestingly, Davidson (2002:299-300) also reports a separate possessive paradigm for the Makah language only, defined as clitics "that attach to the first word of referring phrases containing a noun to indicate possessor." In his examples of Makah, these endings do not occur in conjunction with -*uk*, but rather convey possession by themselves. He notes that "The possessive clitics can attach to kin terms..., but first person singular also has a special possessive form =*ax* used only with kin terms..." This paradigm is included below:

	Singular		Plural
1st	=siš		=dis
2nd	=sic		=saqsa / =sicaa
3rd	='uuc		='uućaƚ

(95) ḥaẁiƚuksiš John
      ḥaẁiƚ-uk -**siš**   John
      chief -POSS-**1S.IND** John
      'John is my chief.'

(96) y̓ukʷiiqsakniš Ken
      y̓ukʷiiqsu-ʔak -**niš**   Ken
      brother   -POSS-**1PL.IND** Ken
      'Ken is our brother.'

Finally, proper names can never be possessed, as in (97).

(97) *ʔuʔukʷinkitʔiš ńupuḥukqs ńupuḥukʔitk
      ʔu-ʔukʷink -mit-ʔiš ńupuḥ -uk -qs ńupuḥ -uk -ʔitk
      ∅ –talk.with-PST-3IND ńupuḥ -POSS -1S ńupuḥ -POSS -2S
      'My ńupuḥ was talking to your ńupuḥ.'[29]

3.4.1.1 Third person agreement versus the determiner -*ʔi*

In non-ambiguous contexts, the appearance of third person agreement on the possessum is optional. This optionality is demonstrated in examples (98) - (99) below.

(98) wiwiikc̓aqmapʔiš John...
      wi-wiik-c̓aqmap-ʔiš   John...
      R -NEG-to.mind-3IND   John...
      'John isn't minding...'

        a. ✓...ńuẁiiqs-**ak**-__ -'his father'   b. ✓...ńuẁiiqs-**ak**-**ʔi** - 'his father'
           father-POSS   father-POSS-3

        c. ✓...ḥaẁiƚ-**uk**-___ - 'his chief'   d. ✓...ḥaẁiƚ-**uk**-**ʔi** - 'his chief'
           chief-POSS   chief-POSS-3

(99) a.   činʔiƛitʔiš y̓ukʷiiqs**akʔi**
            činʔiƛ -mit -ʔiš   y̓ukʷiiqsu-**ʔak-ʔi**
            pull.hair-PST -3IND y.sibling-**POSS-3**
            'He/She pulled his/her younger sibling's hair.'

      b.   činʔiƛitʔiš y̓ukʷiiqs**ak**
            činʔiƛ -mit-ʔiš   y̓ukʷiiqsu-**ʔak**
            pull.hair-PST-3IND y.sibling-**POSS**
            'He/She pulled his/her younger sibling's hair.'

By contrast, where the PSR is first or second person the agreement morphemes following POSS are always obligatory.

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[29] In a context where the mothers of two (unrelated) girls, both called *ńupuḥ*, are talking about the girls.

(100) a. m̓ačiƛit̓iš   kʷaaʔuucukqs ʔuuštaqyuʔi
      m̓ačiƛ-mit-ʔiš   kʷaaʔuuc -uk   -qs ʔuuštaqyu-ʔi
      bite   -PST-3IND grandchild-POSS-1S doctor   -DET
      'My grandchild bit the doctor.'

    b.   * m̓ačiƛit̓iš kʷaaʔuucuk__ ʔuuštaqyuʔi
         m̓ačiƛ-mit-ʔiš   kʷaaʔuuc -uk   __ ʔuuštaqyu-ʔi
         bite   -PST-3IND grandchild-POSS__   doctor   -DET
         * 'My grandchild bit the doctor.' (✓'His/Her grandchild bit the doctor')

(101) a. ʔuutaʕaƛitniš č̓apacukqin
      ʔuutaq-ʔaƛ -mit -niš   č̓apac -uk   -qin
      fix   -TEMP -PST-1PL.IND canoe -POSS -1PL
      'We fixed our canoe.'/ canoe-race context: 'We got our canoe ready.'

    b.   * ʔuutaʕaƛitniš č̓apacuk__
         ʔuutaʕaƛ-mit-niš   č̓apac-uk   __
         fix   -PST-1PL.IND canoe-POSS ___
         * 'We fixed <u>our</u> canoe.'
         * 'We fixed <u>his</u> canoe.'

Third person possessive agreement is homophonous with the determiner -ʔi. Given this, and given that both third person agreement and the determiner are optional, there are three possible analyses of the surface form [-ʔi]:

    (i)   [-ʔi] consists of null third person agreement plus a determiner
    (ii) [-ʔi] consists of an overt third person agreement plus a null determiner
    (iii) [-ʔi] can consist of either (i) or (ii)

There are two types of evidence that support the second option, that third person agreement is overt and distinct from the determiner, which is null. First, removing a determiner can change a sentence's meaning, but does not cause outright ungrammaticality (2.4.2). This contrasts with third person agreement throughout NCN (compare e.g. Mood in 2.3.2), which becomes obligatory in ambiguous contexts. This predicts that if the third person possessive agreement is null, removal of -ʔi (presumably the determiner) in an ambiguous possessive context should be grammatical. This is not the case.

(102) a. k̓ʷaẏaapčipʔiš ʔuxʷaapak(<u>ʔi)</u>
      k̓ʷa -ẏaap -čip -ʔiš   ʔuxʷaap-ak -<u>(ʔi)</u>
      break-CAUS -BEN -3IND paddle -POSS-(<u>3</u>)
      'He broke his paddle.'

    b. k̓ʷaẏaapčipniš ʔuxʷaapak<u>ʔi</u>
      k̓ʷa -ẏaap –čip -niš   ʔuxʷaap-ak -<u>ʔi</u>
      break-CAUS-BEN-1PL.IND paddle -POSS-<u>3</u>
      'We broke his paddle.'

c. * k̓ʷaẏaapčipniš ʔuxʷaapak
    k̓ʷa -ẏaap –čip –niš   ʔuxʷaap-ak
    break-CAUS-BEN-1PL.IND paddle -POSS
    * 'We broke his paddle.'

In (102a) above, third person possessive interpretation is recoverable from the antecedent (evident in the third person subject agreement), and the *-ʔi* following POSS is optional. However, in (102b-c), where an appropriate local antecedent is absent (subject agreement is first person), *-ʔi* is obligatory. If *-ʔi* were a determiner in this example, this pattern could not be predicted, as the determiner should be optional in all of (102a-c).

        Secondly, recall the fact that the determiner may not occur more than once in a single clause (2.4.2).

(103)* ʔuʔiicʔiš maamaati**ʔi** piišpiš**ʔi**
      ʔu -ʔiic   -ʔiš   maamaati-**ʔi**   piišpiš-**ʔi**
      ∅ -consume -3IND bird   **-DET** cat   **-DET**
      'The cat is eating the bird.'   (repeated from 34d)

The regular appearance of grammatical examples like the one below, with one DP marked for third person possessive agreement and the other marked for definiteness, suggest further that the *-ʔi* following POSS and the *-ʔi* independent of POSS are two different morphemes.

(104) witqʔiš huupukʷas**uk**ʔi ʔuuštaqyuʔi
      witq -ʔiš   huupukʷas-**uk** -ʔi   ʔuuštaqyu-ʔi
      ugly-3IND car   **-POSS**-3   doctor -DET
      'The doctor's car is ugly.'

In addition, example (105) illustrates that, in contrast to the determiner, two third-person possessed arguments can co-occur.

(105) caaskʷaʔiiḥʔiš ʕiniiƛukʔi Doug piišpišukʔi
      caaskʷaʔiiḥ -ʔiš   ʕiniiƛ-uk -ʔi Doug piišpiš-uk -ʔi
      chase   -3IND dog –POSS-3 Doug cat   -POSS-3
      'Doug's dog is chasing (around) his cat.'

Although the evidence presented here does not completely rule out option (iii) (the possibility that *some* instances of *-ʔi* consist of an overt determiner plus null agreement), I will assume on the grounds of economy that option (ii) is correct. At least some cases of *-ʔi must* consist of a null determiner plus overt third person possessive agreement, and there is no evidence that any instances of *-ʔi must* consist of an overt determiner plus null agreement.

3.4.1.2 Agreement and DP structure

I assume a Spec-head relationship is responsible for determining agreement, such that possessive agreement is structurally determined by the possessor (c.f. 2.3.2). Therefore, I propose an Agreement Phrase (AgrP) associated with a set of agreement (Φ) features generated above PossP. Following Ura's (1996) theory of multiple feature checking, I assume that the possessor DP may be associated with both [+POSS] and a set of agreement features. Having checked its possessive feature with the possessive head, the possessor DP is then the closest available argument to check the agreement features in AgrP.

(106)

maḥt̓ii-ʔak-ʔi Rachel
maḥt̓ii-ʔak -ʔi Rachel
house-POSS -3 Rachel
'Rachel's house'
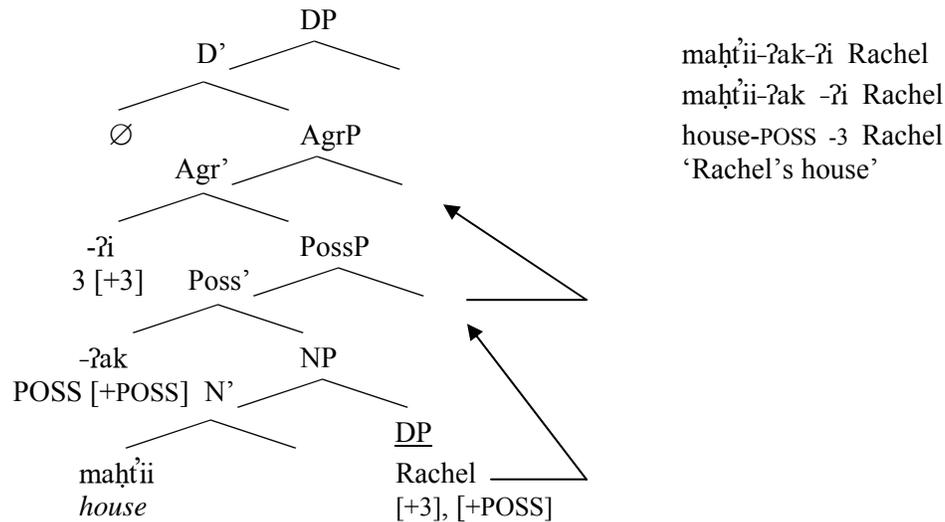
     I assume the position of enclitics in DP is prosodically determined (2.4.1), just as in the clausal domain (see Wojdak 2003, in prep, for justification of this analysis in the clausal domain[30]). As with the clausal domain, a syntactic configuration is assumed to input a linearized sequence of morphemes to the PF level following SPELL-OUT. A linearization of the above syntactic representation thus looks like this:

(107)   input to PF: <u>Agr</u> + <u>POSS</u> + PSM ...

        merger 1:   <u>Agr</u> + [PSM - POSS] ...

        merger 2:   [[PSM - POSS] - Agr] ...

✓*predicted order:*   maḥt̓ii -ʔak -ʔi ....

This correctly predicts the appearance of functional clitics on the left-most element of a possessum.

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[30] There is an emerging consensus that the position of agreement clitics in Nuu-chah-nulth is prosodically determined. For further discussion outside of this model see Stonham 1998, Davidson 2002, and Werle 2002.

3.4.1.3 Past possessive and DP structure

It is important to point out that although the POSS and agreement clitics are generally adjacent, they can be divided by the past tense morpheme -*mit*[31]. This is demonstrated in (108)-(111).
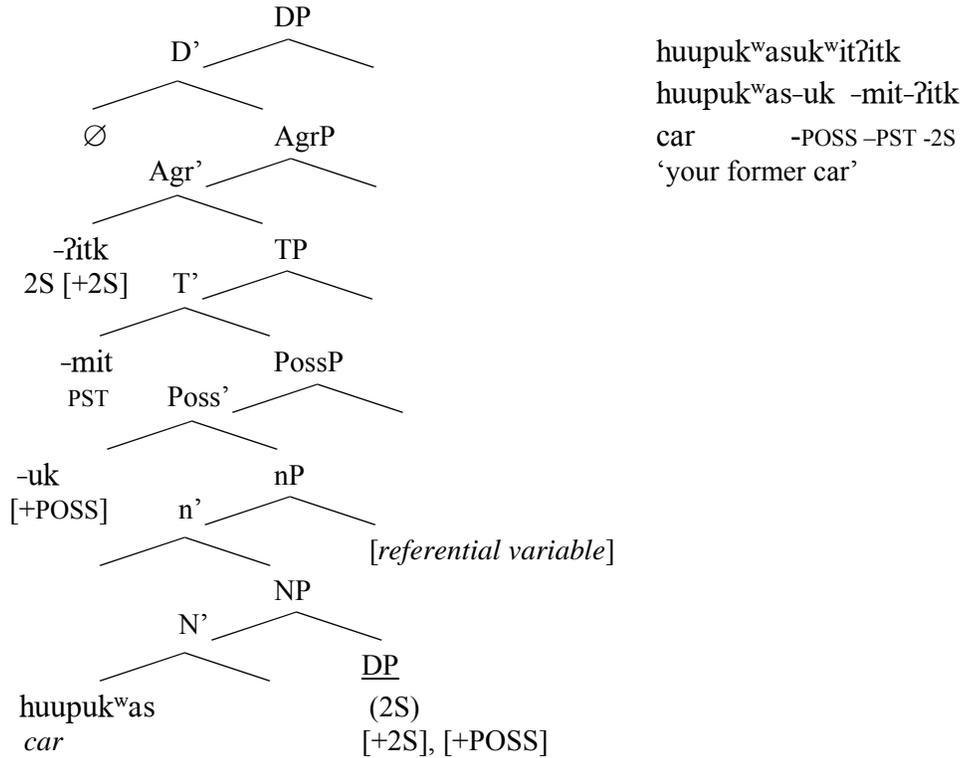
(108) hiqaawaʔiš Ken huupukʷasuk^witʔi
      hiq   -aa   -waʔiš   Ken huupukʷas-<u>uk</u>   **-mit** -ʔi
      wreck-CONT-3QUOT Ken car   -<u>POSS</u>-**PST**-<u>3</u>
      'Ken wrecked his car [and destroyed it].'

(109) ńaatsiičiƛitsiš huupukʷasuk^witʔitk
      ńaatsii-šiƛ   -mit -siš   huupukʷas-<u>uk</u>   **-mit**-ʔitk
      see   -PERF-PST-1S.IND car   **-**<u>POSS</u>-**PST**-<u>2S</u>
      'I saw your former car.'[32]

(110) ʕiniiƛuk^witqs   (R. Wojdak, p.c.)
      ʕiniiƛ-<u>uk</u> **-mit** -<u>qs</u>
      dog   -<u>POSS</u>-**PST**-<u>1S</u>
      'my old (former) dog'

(111) tiiča-<u>ʔak</u>-**it**-<u>qs</u>   (R. Wojdak, p.c.)
      tiiča   –<u>ʔak</u> **-mit** -qs
      teacher-<u>POSS</u>-**PST**-<u>1S</u>
      'My deceased teacher' (*former teacher)

      These data provide evidence that the combination of possessive -*uk*/-*(ʔ)ak* and agreement marker cannot be treated as monomorphemic. Structurally, I assume the two are separated by a Tense Phrase (TP).

---

[31] Attached to a DP, past tense indicates death, destruction or loss. See Burton 1996, among others, for more discussion of past tense on nouns.
[32] This is possible in the context of the speaker having been at a junk yard after the car was wrecked, or also if the car was fine and had been sold to someone else.

(112) *Past tense and the structure of DP*

```
                    DP
          D'_____/_____
        /    \              
      ∅          AgrP
          Agr'_____/_____
        /    \              
     -ʔitk        TP
     2S [+2S]  T'____/_____
        /    \              
      -mit        PossP
      PST    Poss'___/_____
        /    \              
      -uk         nP
      [+POSS]  n'____/_____
        /    \          [referential variable]
                    NP
              N'___/_____
        /    \              
    huupukʷas        DP
    car             (2S)
                [+2S], [+POSS]
```

huupukʷasukʷitʔitk
huupukʷas-uk –mit-ʔitk
car   -POSS –PST -2S
'your former car'

Because I am assuming that the determiner and possessive agreement are separate functional heads (3.4.1.1), I propose to situate AgrP below D but above T in the hierarchy of functional projections in DP, yeilding the linear order of morphemes in (113):

(113)   -POSS-PST-AGR-DET

3.4.1.4 Adjectival modification

Where the possessum consists of more than one word, the POSS and agreement clitics attach to its left-most element. This is illustrated where adjectives appear to the left of the PSM they modify (114) – (115).

(114) a.   ńaatsiičiƛitwaʔiš Christine **maḥt̉ii**
               ńaatsii-šiƛ –mit-waʔiš   Christine **maḥt̉ii**
               see-   -PERF-PST-3QUOT Christine house
               'Christine saw <u>a house</u>.'

       b.   ńaatsiičiƛitwaʔiš Christine **maḥt̉ii-ʔak-ʔi** Rachel
               ńaatsii-šiƛ –mit-waʔiš   Christine **maḥt̉ii-ʔak -ʔi   Rachel**
               see-   -PERF-PST-3QUOT Christine **house-POSS-3 Rachel**
               'Christine saw <u>Rachel's **house**</u>.'

c.   ńaatsiičix̣itwaʔiš Christine **c̓ušukukʔi** maḥt̓ii Rachel
      ńaatsii-šix̣ -mit-waʔiš Christine **c̓ušuk-uk -ʔi** maḥt̓ii Rachel
      see- -PERF-PST-3QUOT Christine **new -POSS-3** house Rachel
      'Christine saw <u>Rachel's **new** house</u>.'

(115) a.   ʔuʔusumʔiš Christine ʔiḥaqaq x̣̓iḥuml̓ x̣̓iʔičuml̓
        ʔu-ʔusum-ʔiš Christine ʔiḥ-aqaq x̣̓iḥuml̓ x̣̓iʔičuml̓
        ∅ - want- 3IND Christine <u>big-very red hat</u>
        'Christine wants <u>a big red hat</u>.'

      b.   ʔu-ʔusum-ʔiš Christine **ʔiḥ-aqaq-uk-ʔi** x̣̓iḥuml̓ x̣̓iʔičuml̓ Florence
        ʔu-ʔusum-ʔiš Christine **ʔiḥ-aqaq-uk -ʔi** x̣̓iḥuml̓ x̣̓iʔičuml̓ Florence
        ∅ - want- 3IND Christine **big-very-POSS-3** red hat Florence
        'Christine wants <u>Florence's **big** red hat</u>.'

The structure below represents modification of a possessum:

(116)

c̓ušukukʔi maḥt̓ii Rachel
c̓ušuk-uk -ʔi maḥt̓ii Rachel
new -POSS -3 house Rachel
'Rachel's new house'
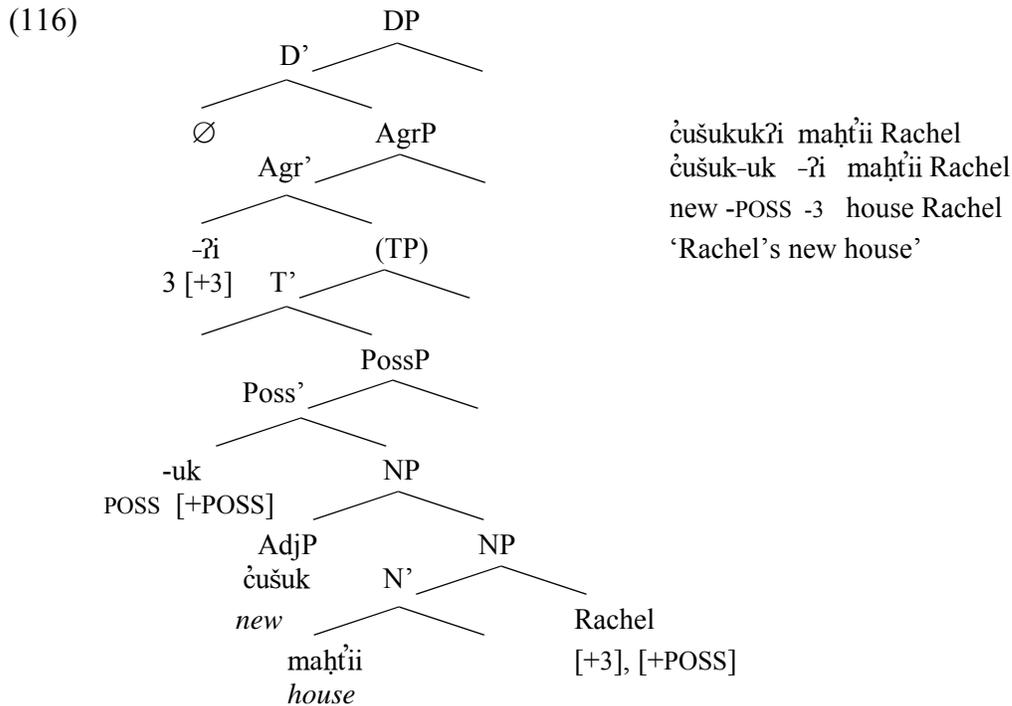
In this configuration, the AP headed by the adjective *c̓ušuk* (*new*) adjoins to the NP it modifies, such that it is linearly adjacent to the DP clitic sequence and can thus undergo morphological merger with the clitic sequence at PF. The possessor and possessum remain in the same positions as before. Modification of possessed arguments provides the clearest evidence for a right-branching specifier model[33], in that unmarked Adjective-PSM PSR word order can not be generated (without multiple derivations) in a configuration with left-branching specifiers. This is because the possessor DP intervenes

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[33] I am grateful to R. Wojdak for this suggestion.

between the PSM and its modifier, predicting the order Adjective-PSR-PSM. See Braithwaite (2003) for a further discussion of why modification is problematic for a model involving left-branching specifiers.

3.5   Nominal predicates

Nominal as well as verbal and adjectival roots can take mood/agreement inflection and serve as the main predicate of a clause in Nuu-chah-nulth (2.6). Predicate nominals can be possessed:

(117)   tiičaẁit̕asukʔick ƚuucmaʔi
      tiiča -ẁit̕as -uk -ʔick ƚuucma-ʔi
      teacher-planning.to-POSS-2S.IND woman-DET
      'That woman is going to be your teacher.'

(118)   y̓ukʷiiqsakniš   Ken
      y̓ukʷiiqsu-ʔak -niš   Ken
      brother   -POSS-1PL.IND Ken
      'Ken is our brother.'

(119)   ḥaẁiƚuksiš John
      ḥaẁiƚ -uk -siš   John
      chief -POSS-1S.IND John
      'John is my chief.'

Possessed nominal predicates differ from their non-possessed counterparts in that the predicative mood-subject agreement matches the person and number of the possessor, rather than that of the subject.

(120) *Structure of possessed nominal predicate*

```
                    CP
          C’_____/_____
                  /         \
                MoodP
        Mood’___/\___
              /       \
          -siš       PossP
         1S [+1S]  Poss’__/\__
                  /          \
               -uk          nP
          POSS [+POSS]  n’__/\____
                       /          \
                    N’____/\    DP_Subj
                   /        \    John
                ḥaẇiⱡ      DP_PSR
                chief       (1S)
                        [+1S], [+POSS]
```

ḥaẇiⱡuksiš John
ḥaẇiⱡ -uk –siš   John
chief -POSS-1S.IND John
'John is my chief.'
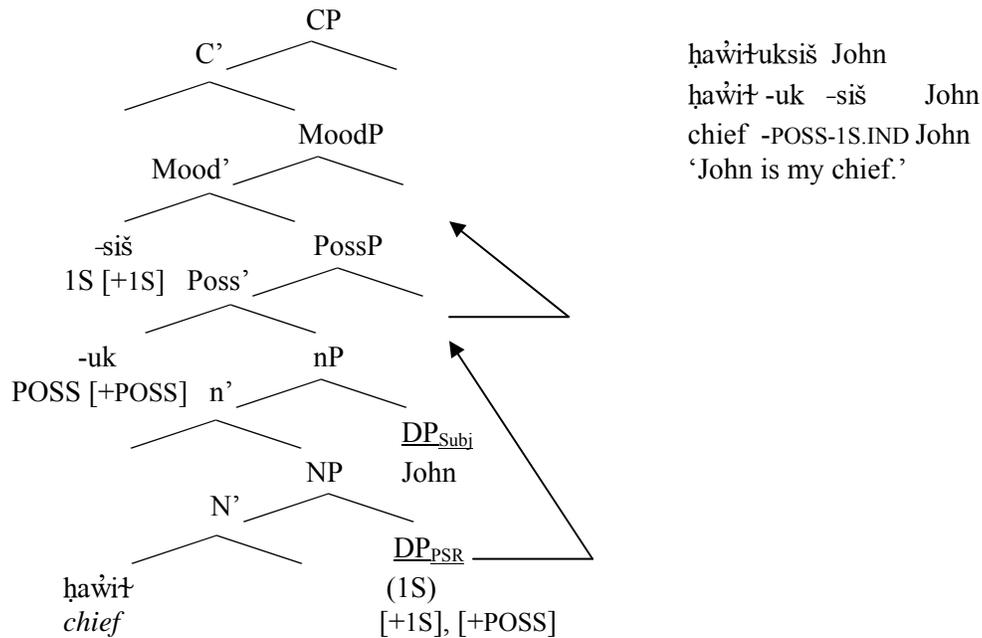
Note that in the structure above, POSS is situated within the hierarchy of clausal functional projections. I assume that like Tense, this projection may appear across categories on both arguments and predicates. Unlike Tense, however, possession can only refer to a nominal, not a verb. In (69) the predicate nominal *ḥaẇiⱡ* (*chief*) combines with the clausal clitics prosodically, as it does in non-possessive cases. Nominal predicates may only have one overt argument, a subject, which is generated parallel to the subject of a verb in Spec, nP. The possessor DP raises to check the possessive feature in Spec, PossP; this elevates it above the subject, at which point it qualifies for the shortest derivation to check agreement features with the AgrP.

Finally, the case of argumental nominals must be addressed in light of the extended NP structure presented for predicative nominals. That is, what, if anything, occupies the external specifier position where a subject is projected in predicative cases? I propose, following Higginbotham (1985), that this position is occupied by a variable which saturates the "R" (referential) theta role, and is bound by D, such that DP is present even where the presence of possession causes the determiner to be null.

(121) *Extended NP in the case of arguments*

```
                                DP
                    D'_____/‾‾‾\
               /‾‾‾‾‾‾\
            ∅            PossP
                    Poss'___/‾‾‾‾\
                /‾‾‾‾‾\
          POSS            nP
          [+POSS]    n'___/‾‾‾‾\
                         /‾‾‾‾\       [*referential variable*]
                              NP
                    N'_____/‾‾‾\
                /‾‾‾‾‾\              DP- alienable PSR
            N            DP- inalienable PSR
```
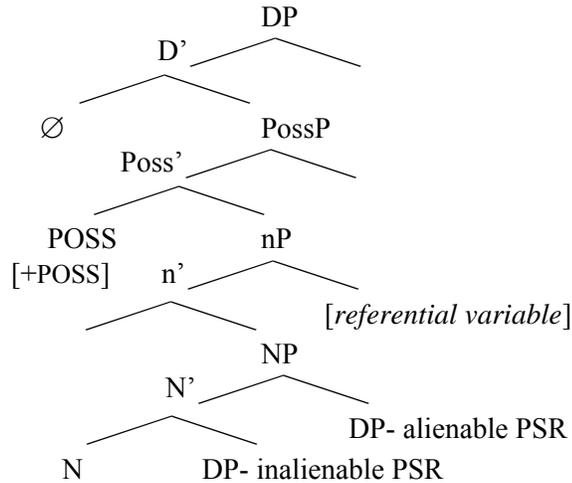
3.6   Summary

This chapter has provided an overview of the distribution and meaning of the alienable and inalienable possessive clitics in Nuu-chah-nulth, and listed the distribution of independent possessive pronouns. I have furthermore suggested a structure that correctly predicts possessive DP word order and cliticization. The person and number of the possessive agreement marker is asserted to be structurally determined by the occupant of Spec, AgrP, and it is suggested that one of a set of agreement features attracts a possessor DP to this position.

I have furthermore proposed a Possessive Phrase (PossP) with a feature [+POSS]. The movement of the possessor to Spec, PossP to check this feature raises it above the subject of a possessed nominal predicate, and hence clausal mood agreement may be determined by the possessor rather than the underlying subject.

4   Nuu-chah-nulth possessor raising

So far this thesis has concentrated on possessed nominals in Nuu-chah-nulth, both in argument and predicate positions. Chapter four describes a third possessive construction, in which possession marked on the predicate refers to the possessor of that predicate's subject. This differs from non-raised possessive constructions in a number of ways. Like possessed nominal predicates (3.5), the possessive marker appears in the clausal clitic sequence (4.1) and predicative mood agreement agrees with the possessor instead of the logical subject (4.2). However, possessor raising crucially differs from possessed nominal predicates in that a possessed subject is obligatorily present, and the possessive clitic refers to the possessor of the subject, not to the possessor of the nominal predicate (4.3). Furthermore, the possessive clitic may optionally be doubled, in which case it appears simultaneously on both the predicate and its subject (4.1.1).

I propose an analysis of possessor raising as an A-type movement rule triggered by a possessive feature which can optionally be generated in the clausal as well as the DP domain (4.3). In section 4.4 I show that several other distinctive properties of the possessor raising construction fall out from the structure proposed, including: restriction to subjects (4.4.1), lack of possessum-possessor constituency (4.4.2), and syntactic locality (4.4.3).

In section 4.5, I discuss the broader theoretical implications of the possessor extraction analysis proposed here. The final part of this chapter compares NCN with other accounts of "possessor raising" cross-linguistically (4.6). I will show that a semantic analysis as proposed for a parallel Korean construction (Tomioka 2004)(4.6.1) is inadequate to describe the empirical generalizations of NCN possessor raising. Finally, I will outline Ura's (1996) minimalist approach to the Japanese subject possessor raising construction (4.6.2), components of which I employ in my own analysis. The last section summarizes the points above and addresses outstanding issues (4.7).

4.1   Possession marked on the predicate

In Nuu-chah-nulth, the possessive clitic *-uk/-(ʔ)ak /-ʔat* associated with a subject may optionally attach to the initial element of the clause instead of or in addition to the subject (122) - (125). If the predicate is not clause-initial the possessive clitic will appear encliticized to the first potential prepredicative host, such as a relative pronoun (124) - (125). I will refer to this construction as possessor raising (PR).

(122) a.   ʔayaqsʔiš čʼapac**uk**ʔi John
               ʔaya -qs   -ʔiš   čʼapac-**uk** -ʔi John
               lots -in.a.vessel-3IND canoe-**POSS** -3 John
               'There's lots in John's canoe.' / 'John's canoe is holding lots.'

       b.   ʔayaqs**uk**ʔiš John čʼapac
               ʔaya -qs   -**uk** -ʔiš John čʼapac
               lots -in.a.vessel-**POSS**- 3IND John canoe
               'There's lots in John's canoe.'/ 'John's canoe is holding lots.'

(123) a. natṗiqʔiš ƛišƛinʔatʔi Adam
    natṗiq -ʔiš ƛišƛin -ʔat -ʔi Adam
    bump[34] -3IND foot -**INAL** -3 Adam
    'S/he clipped Adam's leg.'

   b. natṗiʕatʔiš ƛišƛin Adam
    natṗiq-ʔat -ʔiš ƛišƛin Adam
    bump-**INAL**-3IND foot/feet Adam
    'Adam's foot got clipped.'

(124) ńaatsiičiƛitsiš piišpiš [yaaqʷiɫʔat**ukʷitiis** ṁačiʔat ʕiniiƛ]
   ńaatsii-šiƛ -mit -siš piišpiš
   see -PERF -PST -1S.IND cat
         [yaq -ʔuukʷiɫ-ʔat -**uk** -**mit** -**iis** ṁačiƛ-ʔat ʕiniiƛ]
         [REL-do.to -PASS-**POSS-PST-1S.IREL** bite -PASS dog]
   'I saw the cat [that <u>my dog</u> was bitten by].'
   ('I saw the cat [that bit my dog].')

(125) sukʷinḱanitsiš ʔumʔiiq(sakqs) waaʔat ʔin [čiiʔatapʔaqƛat**uksa** ṗaṗiiʔatqs]
   sukʷink-ʔat -mit -siš ʔumʔiiqsu(-ʔak -qs) waa-ʔat ʔin
   teasing-PASS-PST -1S.IND mother (-POSS-1S) say-PASS that

        [čii -ʔatʔap -ʔaqƛ -ʔat -**uk** -**sa**   ṗaṗii -ʔat -qs]
        [cut-away.from -TEMP -PASS-**INAL[35]-1S.NEUT** ear(s)-INAL-1S]
   'My mother used to tease me by saying [she would cut my ear(s) off].'

Raised and non-raised possessive constructions are thematic paraphrases; they are truth-conditionally equivalent (126) - (127).

 (126) a. witqʔiš huupukʷas**uk**ʔi ʔuuštaqyuʔi   *non-raised*
    witq -ʔiš huupukʷas-**uk** -ʔi ʔuuštaqyu-ʔi
    ugly-3IND car -**POSS**-3 doctor -DET
    'The doctor's car is ugly.'

   a. witq**uk**ʔiš huupukʷas ʔuuštaqyuʔi   *raised*
    witq-**uk** -ʔiš huupukʷas ʔuuštaqyu-ʔi
    ugly-**POSS**-3IND car   doctor -DET
    'The doctor's car is ugly.'

---

[34] The root *natṗiq* means to cause someone pain indirectly, by lightly brushing by or bumping a pre-existing injury (or e.g. a skin blemish). Usually, the pain is greater than expected by the touch itself.
[35] Morphological identity avoidance will be discussed in section 4.1.2. The manifestation of the inalienable morpheme in the guise of the alienable form here is unrelated to the type of alternation discussed in section (3.1).

(127) a.　huumhuuma__ʔiš tiičmaa__ats　　　　　　　　　　　　　*non-raised*
　　　huum-huum　　　　　-a　-ʔiš　tiičma-__ʔat__ -qs
　　　R　-in.up/down.motion-CONT-3IND　heart -INAL-1S
　　　'My heart is beating fast.'

　　　b.　huumhuum__at__s tiičma　　　　　　　　　　　　　　*raised*
　　　huum-huum　　　　　-__ʔat__ -siš　　tiičma
　　　R　-in.up/down.motion-__INAL__-1S.IND　heart
　　　'My heart is beating fast.'

Nakayama (2001:130-133) suggests for Ahousaht NCN that raised and non-raised possessive constructions are preferred in different discourse contexts. In particular, he posits that where the possessor is more likely than the possessum to be the salient element, an utterance is more likely to be expressed in the possessor raising construction. Nakayama offers four example sentences taken from textual materials: in two sentences the possessor is the discourse-salient element, and possession is expressed on the predicate. In the other two the possessum is the most discourse-salient, and possession is expressed on the argument. He further equates discourse salience with animacy, and suggests that the tendency of possessor raising to interact with passive marking indicates that an inanimate, passive possessed subject is more discourse salient than its animate, non-passive counterpart. The consultants I worked with did not show a preference for utterances with first/second person possessors to be expressed with possessor raising any more than those with third person possessors, in contrast to the person hierarchy preferences shown with passive constructions (2.3.5 and 2.3.6). However, further exploration of issues of discourse salience or focus tracking are beyond the scope of the present investigation.

4.1.1 Possessive doubling

While the possessive clitic may appear in either the clausal or DP domain, it may also appear in both simultaneously.

(128) t̓ičiʔat__uk__s m̓uksʔi__ʔak__qs Adam
　　　t̓ičiƛ -ʔat -__uk__ -siš　　m̓uksʔi -__ʔak__ -qs Adam
　　　throw -PASS -__POSS__-1S.IND　rock　-__POSS__ -1S Adam
　　　'My rock was thrown by Adam.'

(129) witq__uk__ʔiš huupuk̓ʷas__uk__ʔi ʔuuštaqyuʔi
　　　witq-__uk__ -ʔiš　huupuk̓ʷas-__uk__ -ʔi ʔuuštaqyu-ʔi
　　　ugly-__POSS__-3IND car　　　　-__POSS__ -3 doctor　-DET
　　　'The doctor's car is ugly.'

(130) k̓ʷay̓aap̓at__uk__ʔiš čapac__uk__ʔi Ken
　　　k̓ʷa -y̓aap -ʔat -__uk__ -ʔiš　čapac-__uk__ -ʔi Ken
　　　break-CAUS-PASS -__POSS__ -3IND　canoe-__POSS__ -3 Ken
　　　'Ken's canoe got broken (by him/her).'

(131) qaḥsaap**uk**ʷaḥ ḥawiɫaƛ**uk**qas muwač[36]
  qaḥ-sap -**uk** -maḥ ḥawiɫaƛ -**uk** -qas muwač
  die-CAUS-**POSS**-1S.IND boy   -**POSS**-1S deer
  'My son killed a deer.'

(132) huumhuum**at**s tiičma**at**qs
  R- huum   -**ʔat** -siš   tiičma-**ʔat** -qs
  in.up/down.motion-**INAL**- 1S.IND heart -**INAL**-1S
  'My heart is beating fast.'

For those speakers who accept this construction, the "lower" POSS on the subject argument can optionally appear in a sentence in which the POSS already appears on the predicate. This is also reported by Rose (1981:236-237) for Kyuquot.

Acceptability judgments of possessive doubling expressions vary widely, however: the one Clayoquot speaker consulted on this question always doubled the possessive marker where the PSM was the subject. One Ahousaht speaker always doubled the possessive marker, another varied on judgments within a single elicitation session, and two more both varied on their judgments, passionately, on different days. One Ucluelet speaker always judged possessive-doubled sentences as strongly bad, and another Ucluelet speaker, a sibling of the first, consistently accepted possessive-doubled sentences as good. In short, the possessive-doubled construction can be characterized as optional, but not acceptable to all speakers at all times.

4.1.2 Identity avoidance and *–ʔat* / *-uk* alternation on predicates

I have shown that the inalienable possession marker *–ʔat* and the passive marker *–ʔat* can both appear in the second-position clitic sequence. This predicts that in the environment of both a passive predicate and an inalienable possessum, possessor raising will cause the appearance of two *–ʔat*'s in the clitic sequence. However, in this environment the inalienable POSS manifests as the alienable POSS *-uk/-ʔak*, which suggests *-uk/-ʔak* is perhaps not really 'alienable', but rather the 'unmarked' or 'default' form.

*non-raised form: inalienable possessive *-ʔat* on possessum*

(133) čʼiʔatamitwaʔiš Vincent p̓ap̓ii**ʔat**ʔi
  čʼi -ʔatap   -mit -waʔiš Vincent p̓ap̓ii -**ʔat** -ʔi
  cut-away.from-PST -3QUOT Vincent ear   -**INAL** -3
  'It is said Vincent [Van Gogh] cut his [own] ear off.'

(134) k̓ʷaẏaamitʔiš čims ʔaʔaapyumɫ**ʔat**ʔi John
  k̓ʷa -ẏaap -mit -ʔiš čims ʔaʔaapyumɫ -**ʔat** -ʔi John
  break -CAUS -PST -3IND bear arm/shoulder -**POSS** -3 John
  'A bear broke John's arm.'

Passive possessor raised form: inalienable –ʔat becomes –uk on predicate[37]

(135) čiʔatap**atukʷit**waʔiš Vincent p̓ap̓ii
       či -ʔatap   **-ʔat** **-uk** -mit -waʔiš   Vincent   p̓ap̓ii
       cut-away.from-**PASS** -**INAL**-PST -QUOT Vincent ear
       'It is said Vincent's ear got cut off (by somebody).'

(136) k̓ʷay̓aap̓**atuk**ʷitʔiš John ʔaʔaapyumɬ ((ʔuḥʔat) čims)
       k̓ʷa   -yaap **-ʔat** **-uk** -mit -ʔiš   John ʔaʔaapyumɬ ((ʔuḥʔat) čims)
       broken-CAUS-**PASS**-**POSS**-PST-3IND John arm/shoulder ((by)   bear)
       'John's arm was broken (by a bear).'

(137) ʔuʔiip̓**atuk**siš niča x̌ikšiʔat
       ʔuʔiip-**ʔat** **-uk** –siš   niča x̌ikši –ʔat
       give -**PASS-POSS**-1S.IND nose punch-PASS
       'I was punched/ given a punch in the nose.'

       Yip (1998) provides an OT analysis of haplology effects such as this one, proposing a single principle by which languages avoid sequences of homophonous elements[38]. Specifically, she shows that the Obligatory Contour Principle (OCP, "Output must not contain two identical elements") applies to the morphological as well as the phonological domain. In her analysis, morphological or phonological avoidance of identical sequences can interact with the rest of the grammar and, for example, force a choice between different syntactic outputs. I follow this analysis to explain why NCN disallows the repetition of *–ʔat* within a word. This constraint only holds in the context of *–ʔat* (as INAL) following *–ʔat* (as PASS) on the same predicate complex, and is not related to the types of alternation between alienable and inalienable discussed in 3.1.

4.2   Subject agreement matches the possessor

       In the possessor raising construction the predicate's subject inflection, evident in the person/number of the final mood marker[39], matches the person/number of the subject's *possessor* (138-142, b examples). This contrasts with the non-raised form in which the final mood marker agrees with the sentence's *subject* (138-142, a examples) (Rose 1981, Davidson 2002, Wojdak 2004a).

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[37] These forms must be passive, while those above may not be. NCN follows an animacy hierarchy which strongly prefers first/second person subjects over third person. For further discussion see Klokeid (1978), Whistler (1985) and Kim (2000).
[38] I am grateful to Doug Pulleyblank for bringing this to my attention.
[39] I follow Davis and Sawai (2001) in the assumption that a portmanteau Mood Phrase is the clausal functional projection associated with NCN subject agreement. (2.3.2)

Possessive marked on the argument: *Possessive marked on the predicate:*
agreement matches Subj   *agreement matches subject's PSR*

(138) a. wiwiišʕaqƛ**ʔis** piišpiš**uk**qs   b. wiwiišʕaqƛ**uksiš** piišpiš
     wi -wiišʕaqƛ-**ʔiš** piišpiš-**uk** -qs   wi -wiišʕaqƛ-**uk**   -**siš**   piišpiš
     R -lazy   -**3IND** cat   -**POSS**-1S   R -lazy   -**POSS** -**1S.IND**   cat
     'My cat is lazy.'   'My cat is lazy.'

(139) a. qaḥsaap**ma** ḥawiłaƛ**uk**qas muwač[40]   b. qaḥsaap**ukʷaḥ** ḥawiłaƛ muwač
     qaḥ-sap-**ma**   ḥawiłaƛ-**uk**-qas muwač   qaḥ-sap -**uk** -**maḥ** ḥawiłaƛ muwač
     die-CAUS-**3IND** boy   -**POSS**-1S deer   die-CAUS-**POSS-1S.IND** boy   deer
     'My boy killed a deer.'   'My boy killed a deer.'

(140) a. ḥininʔaƛ**ʔiš** ḥaawiłaƛ**uk**ʔitk   b. ḥininʔaƛ**ukʔick** ḥaawiłaƛ
     ḥinin -ʔaƛ -**ʔiš**   ḥaawiłaƛ-**uk**-ʔitk   ḥinin -ʔaƛ -**uk** -**ʔick**   ḥaawiłaƛ
     arrive -TEMP-**3IND** son   -**POSS**-2S   arrive-TEMP-**POSS-2S.IND** son
     'Your son[41] arrived.'   'Your son arrived.'

(141) a. capxšiƛ**ʔiš** čaʔak**uk**ʔiʔał   b. capxšiƛ**ukʔišʔał** čaʔak
     capx-šiƛ -**ʔiš**   čaʔak-**uk** -ʔi-ʔał   capx -šiƛ -**uk** -**ʔiš** -**ʔał** čaʔak
     boil -PERF-**3IND** water-**POSS**-3-PL   boil -PERF-**POSS-3IND-PL**   water
     'Their water started boiling.'   'Their water started boiling.'

(142) a. yaaʔak**ʔiš** ƛišƛinʔat**qs**[42]   b. yaaʔak**ats** ƛišƛin
     yaa -ʔak -**ʔiš**   ƛišƛin   -**ʔat** -qs   yaa   -ʔak - **ʔat** -**siš**   ƛišƛin
     sore -DUR-**3IND** lower.leg-**INAL**-1S   sore -DUR -**INAL** - **1S.IND** lower.leg
     'My feet are sore.'   'My feet are sore.'

Notice that the -*ʔat* on the predicate does not lead to a passive interpretation in these instances, so that example (142b) can not be interpreted as "My feet got hurt." See Appendix II for further discussion of passive and inalienable possession.

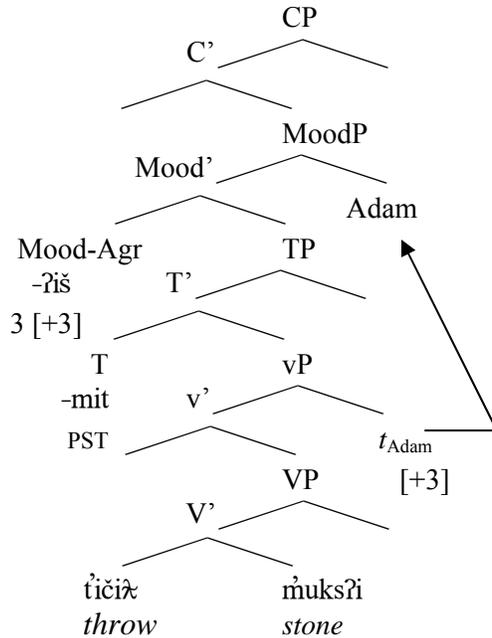## 4.3   Possessor raising structure versus possessed nominal predicates

In this section I propose a syntactic configuration that accounts for the empirical generalizations above. First, recall that a subject is assumed to determine subject agreement via movement to Spec, MoodP to check a set of agreement (Φ) features (example (21) repeated here as (143)).

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[40] This example is from the Ucluelet dialect.
[41] Adding possession to *ḥaawiłaƛ* (boy) or *ḥaakʷaaƛ* (girl) creates the readings *son, daughter*, respectively.
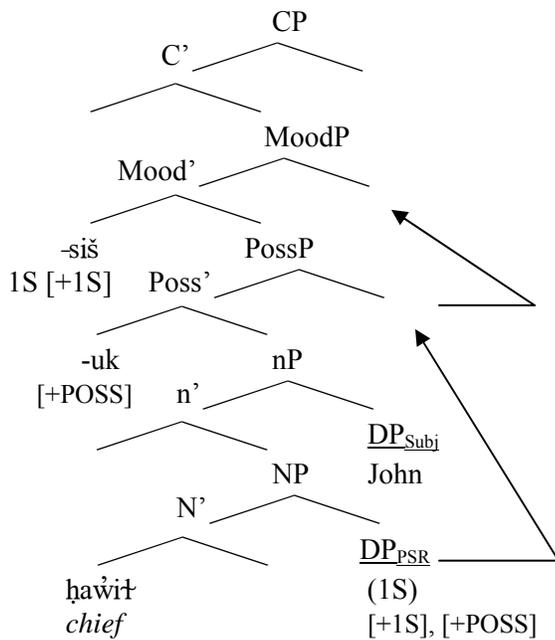[42] Example (142a-b) adapted from Kammler et al (1997:40).

(143)

CP
C'
MoodP
Mood'
Adam
Mood-Agr
–ʔiš
3 [+3]
TP
T'
T
-mit
PST
vP
v'
t_{Adam}
[+3]
VP
V'
t̓ičiƛ
throw
m̓uksʔi
stone

t̓ičiƛitʔiš Adam m̓uksʔi
t̓ičiƛ - mit – ʔiš   Adam m̓uksʔi
throw - PST -3IND Adam   stone/rock
'Adam threw the stone/rock.'

The possessor raising construction differs from canonical subject agreement in that the possessive clitic appears on the predicate and subject agreement indexes the possessor of the subject, rather than the possessed subject. At first glance, these generalizations match those of possessed nominal predicates as discussed in 3.5. In (120) (adapted here as (144)), the possessive clitic sits in the clausal domain, and subject agreement matches the possessor.

(144) *Structure of possessed nominal predicate*

CP
C'
MoodP
Mood'
-siš
1S [+1S]
Poss'
PossP
-uk
[+POSS]
nP
n'
NP
DP_{Subj}
John
N'
ḥaw̓iƚ
chief
DP_{PSR}
(1S)
[+1S], [+POSS]

ḥaw̓iƚuksiš John
ḥaw̓iƚ -uk –siš   John
chief -POSS-1S.IND John
'John is my chief.'

The crucial difference between possessed nominal predicates and PR is the obligatory presence of a possesed subject with PR[43]. Note that nominal predicates can also support PR constructions, in which case the nominal predicate agrees with the possessor of its subject, just as in other cases of PR (145)-(147).

(145) a.   čʼičʼiisaqḥtumwaʔiš ʔiiḥkumcʔatʔi   *non-raised*
                čʼičʼiisaqḥtum-waʔiš   ʔiiḥkumc-**ʔat** -ʔi
                toe   -3QUOT   thumb -**INAL**-3
                'Now his thumb is a toe.'[44]

       b.   čʼičʼiisaqḥtum**ʔat**waʔiš ʔiiḥkumc   *raised*
                čʼičʼiisaqḥtum-**ʔat** -waʔiš   ʔiiḥkumc
                toe   -**INAL**-3QUOT thumb
                'Now his thumb is a toe.'

(146) nunuukmaʕuq**uk**ʷitsiš ʔuuštaqyu
        nu-nuuk-maʕuq-**uk** -mit-siš   ʔuuštaqyu
        R -sing -expert-**POSS**-PST-1S.IND healer
        'My doctor used to be a singer.'

(147) ʔuuštaqyuẃitʼas**uk**siš tʼaṅa
        ʔuuštaqyu-ẃitʼas -**uk** -siš   tʼaṅa
        healer   -plan.to -**POSS**-1S.IND child
        'My child is planning/going to be a doctor.'

In such cases, I claim that the possessor is generated within the possessed subject DP, and *not* within the predicative nominal:

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[43] Notably, all the structural components necessary to trigger PR are present in the non-derived possessive structures of both argument and predicate position. Nothing need be additionally posited to allow PR to occur.
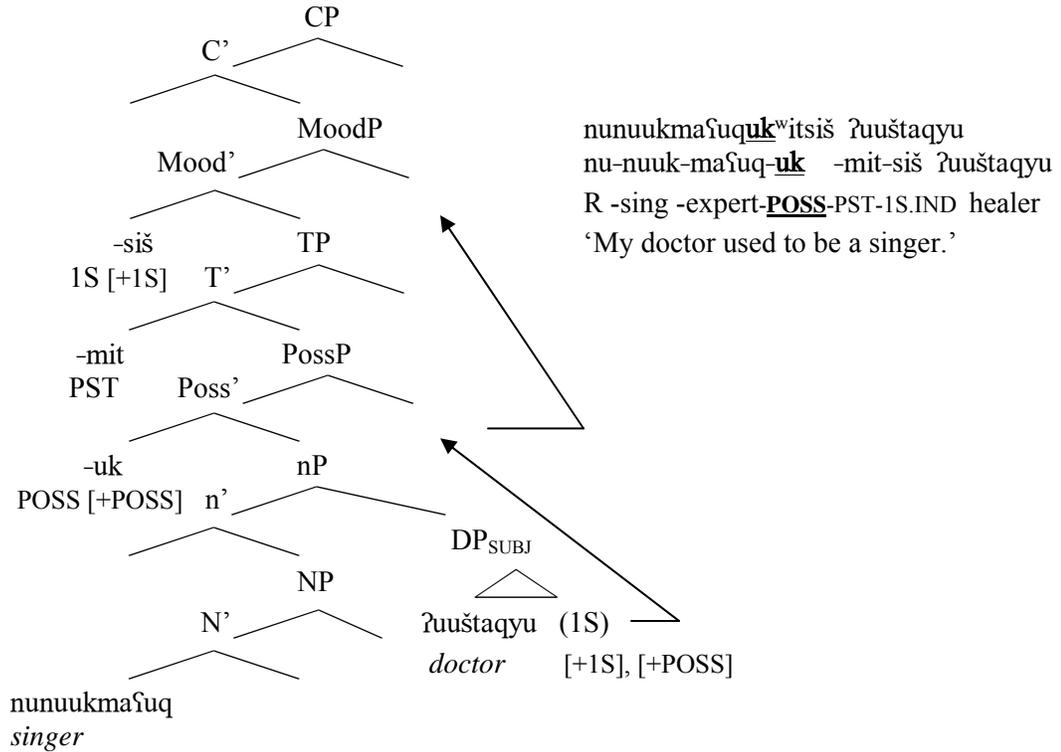[44] This is the end of a story about a man whose severed finger is surgically replaced with a toe.

(148) *nominal predicate with possessor raising*
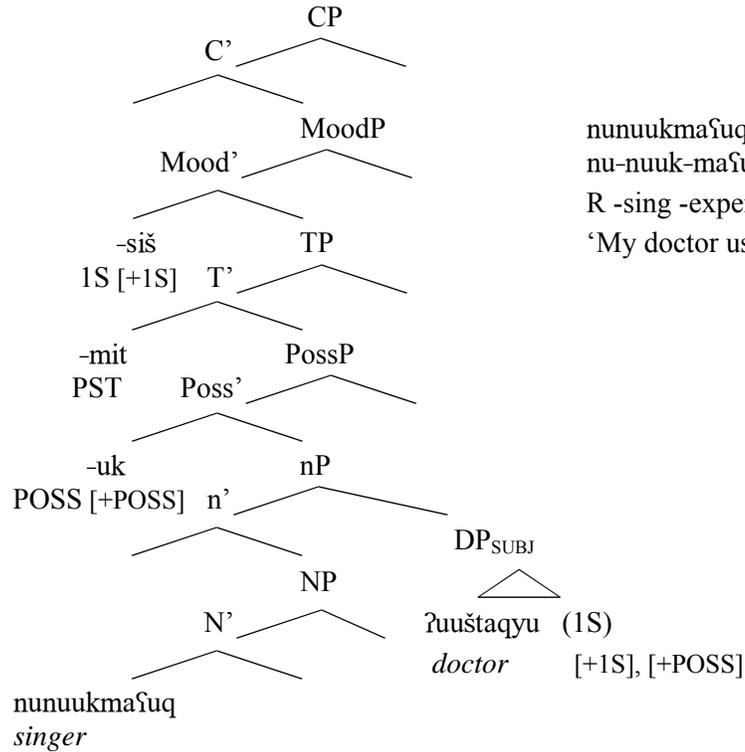
nunuukmaʕuq**uk**ʷitsiš ʔuuštaqyu
nu–nuuk-maʕuq-**uk**   –mit-siš ʔuuštaqyu
R -sing -expert-**POSS**-PST-1S.IND healer
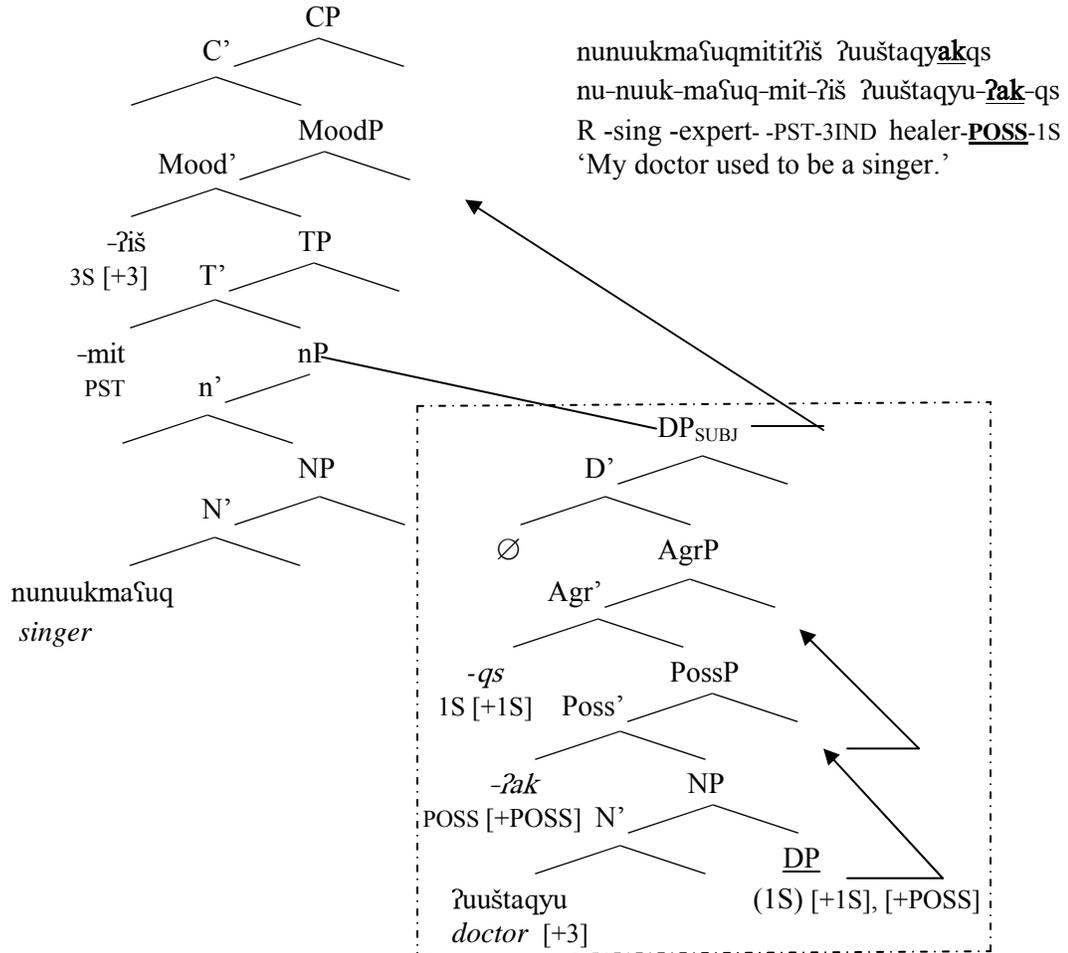'My doctor used to be a singer.'

I propose that when PossP is generated above DP in the clausal domain, the feature [+POSS] attracts the possessor, but not the entire possessed subject DP, into Spec, PossP. From this position, the possessor is the closest DP to Spec, MoodP, where it raises to check the agreement feature there, as in (149).

(149) *nominal predicate with possessor raising- movement of possessor*

```
                        CP
             C'
                         MoodP
              Mood'
        -siš          TP
      1S [+1S]   T'
        -mit          PossP
        PST    Poss'
        -uk           nP
     POSS [+POSS]  n'
                         NP
               N'              DPSUBJ
        nunuukmaʕuq     ʔuuštaqyu  (1S)
        singer          doctor   [+1S], [+POSS]
```

nunuukmaʕuq**uk**ʷitsiš ʔuuštaqyu
nu–nuuk–maʕuq-**uk** –mit-siš ʔuuštaqyu
R -sing -expert-**POSS**-PST-1S.IND healer
'My doctor used to be a singer.'

To summarize, the difference between a possessed nominal predicate and the possessor raising construction is in the element that is being possessed. In possessor raising, where the subject is possessed, an alternate (non-raised) form is always possible. Because one form is derived from the other by movement, we predict that the two forms should be truth-conditionally equivalent, which is illustrated in the data in (4.1) and throughout this thesis. In the structure (150) below, PossP is assumed to be projected within the possessive DP, and the entire DP moves to determine third person agreement (of the possessum *doctor*) rather than first person agreement (of the possessor).

(150) *Alternate form: non-raised possessor*

nunuukmaʕuqmititʔiš ʔuuštaqyakqs
nu–nuuk–maʕuq–mit–ʔiš ʔuuštaqyu–ʔak–qs
R -sing -expert- -PST-3IND healer-**POSS**-1S
'My doctor used to be a singer.'

The alternation of raised and non-raised possession presents a problem for the model of multiple feature checking that I have adopted to explain simple possessive agreement. The possessive subject DP in (150) must be associated with an agreement feature that attracts it to Spec, MoodP, where it determines predicative subject agreement. However, it must not be assigned an agreement feature in possessor raising cases, otherwise the possessive feature of the subject could not be checked and the derivation would crash. Therefore I propose that agreement features may be generated freely, but derivations with unchecked features are filtered out as in the chart below.

(151) *Generation of agreement features:*

	[+Φ] assigned to Subject DP	[+Φ] assigned to Possessor DP
POSS on predicate	*	✓
POSS on PSM	✓	*

55

Possessed nominal predicates, in which the syntactic predicate is possessed, contrast with possessor raising in that they do not have an alternate, non-raised structure. The possessum cannot form a constituent with the possessor and act as a (syntactic) argument, because it is serving as the predicate. There is no lower argument in which the PossP could alternately be situated.

The possessor raising construction is not restricted with respect to predicate type. Of course, it occurs with verbal as well as nominal predicates (152).

(152)   *Possessor raising with a verbal predicate*

caaskʷaʔiiḥ**uk**ʔiš ʕiniiⱦ Doug piišpiš
caaskʷaʔiiḥ-**uk**   –ʔiš ʕiniiⱦ Doug piišpiš
chase   -**POSS** -3IND dog Doug cat
'Doug's dog is chasing a cat.'
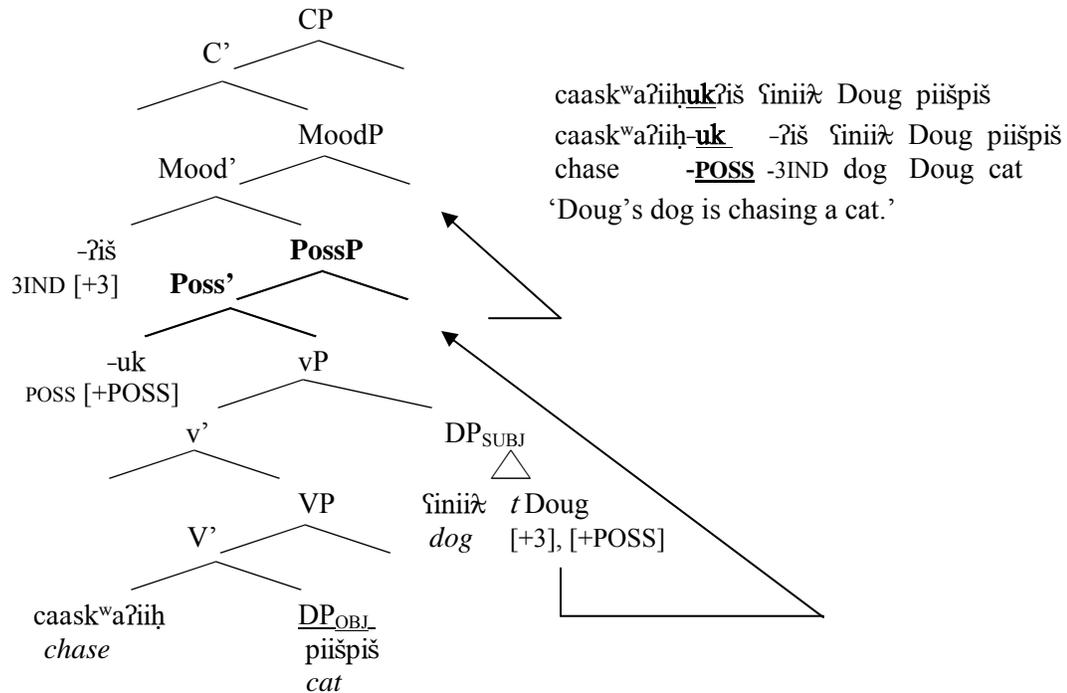
Since POSS appears at the clausal level in the possessor raising construction, I make the minimal structural adjustment necessary to generate it there, by allowing PossP to occupy a position in the functional hierarchy of the clause as well as of that of the DP. Thus, possessor raising forms have clause-level PossP while non-raising forms do not. Further evidence for clause-level PossP is provided by examples in which other clause-level heads intervene between a nominal predicate and POSS, as in (153)-(154). Cliticization is assumed to occur through morphological merger at PF, which processes a linear input of morphemes; the possessive clitic cannot then be the nearest element to the nominal predicate.

(153)   **tiiča**ẁiťasuk**uk**ʔick ⱡuucma
         tiiča   -ẁiťas -uk -**uk** -ʔick   ⱡuucma
         teacher -plan.to -DUR -**POSS** -2S.IND woman
         'Your wife is going to be a teacher.'

(154) **ḥačumsiqsu**čiƛ**uk**s   ʔuušy̓umsukqs
       ḥačumsiqsu-šiƛ –**uk** –siš   ʔuušy̓ums-uk –qs
       brother   -PERF-**POSS**-1S.IND friend -POSS -1S
       'My friend became my brother.' (by adoption)

Finally, I assume that cases of possessive doubling (4.1.1) occur where POSS is pronounced within both the CP and the DP. The agreement of the predicate with the possessor therefore follows from the presence of the PossP in the clausal domain, in that the POSS feature associated with the POSS head attracts the possessor out of its possessed subject and allows it to further raise to check agreement. This agreement is determined structurally by the occupant of Spec, MoodP (2.3.2), which is usually, but not always, the thematic subject of the clause.

4.3.1 Possessive DP remains the underlying subject

Past research on Nuu-chah-nulth has relied on predicate-subject agreement as a test for subjecthood (Rose 1981, Nakayama 2001, Davidson 2002, Wojdak 2004a, among others). In the structures proposed in (4.3), however, there is no single locus that can be deemed responsible for "subjecthood." Specifically, while the underlying subject of a verb is associated with its external argument position (Spec, vP) in a "lower" thematic domain, predicative subject agreement is assumed to be determined by the occupant of Spec, MoodP in the higher inflectional domain. Additionally, to account for PR from a derived passive subject, which carries a theme or patient role, I assume there is a third "subject" A-position which is lower than the inflectional subject position, but which is also necessarily non-thematic[45].

In this light, the diagnostics for "subjecthood" should themselves be split, with some tests targeting a "higher" inflectional subject position and others targeting a "lower" thematically-linked subject position. I propose that subject agreement targets the inflectional subject, or the occupant of Spec, MoodP. I further propose that this element need not be the same element occupying a lower subject position (Spec, vP or the target of a passive subject). Two other tests further illustrate the distributed or split nature of the grammatical relation of "subject": subject control effects (Wojdak 2004b), and referent subject-centered WH-questions (Davis and Sawai 2001).

4.3.1.1 Subject control

Wojdak (2004b) shows that certain complex predicate environments exhibit a "same subject" effect, in which the matrix and embedded subjects are obligatorily covalued[46] (155a-b).

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[45] I am very grateful to Lisa Matthewson and Henry Davis for pointing this out to me. The existence of a third subject position is mandated by the syntactic treatment of passive in NCN (Kim 2000), which I adopt with my assumptions about clause structure. A syntactic (versus lexical) treatment of passive involves promotion of an underlying object to a subject position, and the latter must be necessarily non-thematic (to avoid a theta criterion violation). However this subject position can neither be the same as the one which controls subject agreement (for reasons already given) nor can it be associated with the position where external arguments are generated (since passive subjects are internal arguments).

(155) a.   waɬaakmaḥsasiš mituuni
           waɬaak-maḥsa –siš   mituuni
           go.to   -want.to-1S.IND Victoria
           'I want to go to Victoria.'

     b. * waɬaakmaḥsasiš Kay mituuni
           waɬaak-maḥsa –siš   Kay mituuni
           go.to   -want.to-1S.IND Kay Victoria
           'I want Kay to go to Victoria.'   (Wojdak 2004b)

The example below illustrates that it is the entire possessive DP, not the possessor, which maintains subject control in such an environment, whether PR has applied or not.

No additional morphology on predicate: Same-subject reading

(156) a.   ʔukʷiiɬmaḥsaʔiš tiičaakʔi Florence čʼapac
           ʔukʷiiɬ-maḥsa-ʔiš   tiiča   -ak   -ʔi Florence čʼapac
           make   -want -3IND teacher-POSS-3 Florence canoe
           'Florence's teacher wants to make a canoe.'

     b.   nunuukqatḥʔiš ʔuuštaqyakʔi waaƛwa
           nu-nuuk –qatḥ -ʔiš   ʔuuštaqyu-ʔak –ʔi waaƛwa
           R -sing -claim-3IND healer   -POSS-3 Waatlwa
           'Waatlwa's doctor is pretending to sing.'

Possessor-raising: Same-subject reading

(157) a.   ʔukʷiiɬmaḥs**ak**ʔiš Florence tiičaakʔi čʼapac
           ʔukʷiiɬ-maḥsa-**ak** –ʔiš   Florence tiiča -ak   -ʔi čʼapac
           make   -want -**POSS**-3IND Florence teacher-POSS-3 canoe
           'Florence's teacher wants to make a canoe.'

     b.   nunuukqatḥ**uk**ʔiš ʔuuštaqyu waaƛwa
           nu-nuuk-qatḥ-**uk**   -ʔiš   ʔuuštaqyu waaƛwa
           R –sing-claim-**POSS**-3IND healer   Waatlwa
           'Wathwa's doctor is pretending to sing.'

These data show that the non-derived subject is the active participant in same-subject control environments. In the PR form, where *Florence* (PSR) and *tiiča* (*teacher*, PSM) no longer form a syntactic constituent, [*teacher* t$_{PSR}$] is the only participant permitted to control the 'embedded' subject PRO of the complex predicate. The underlying subject
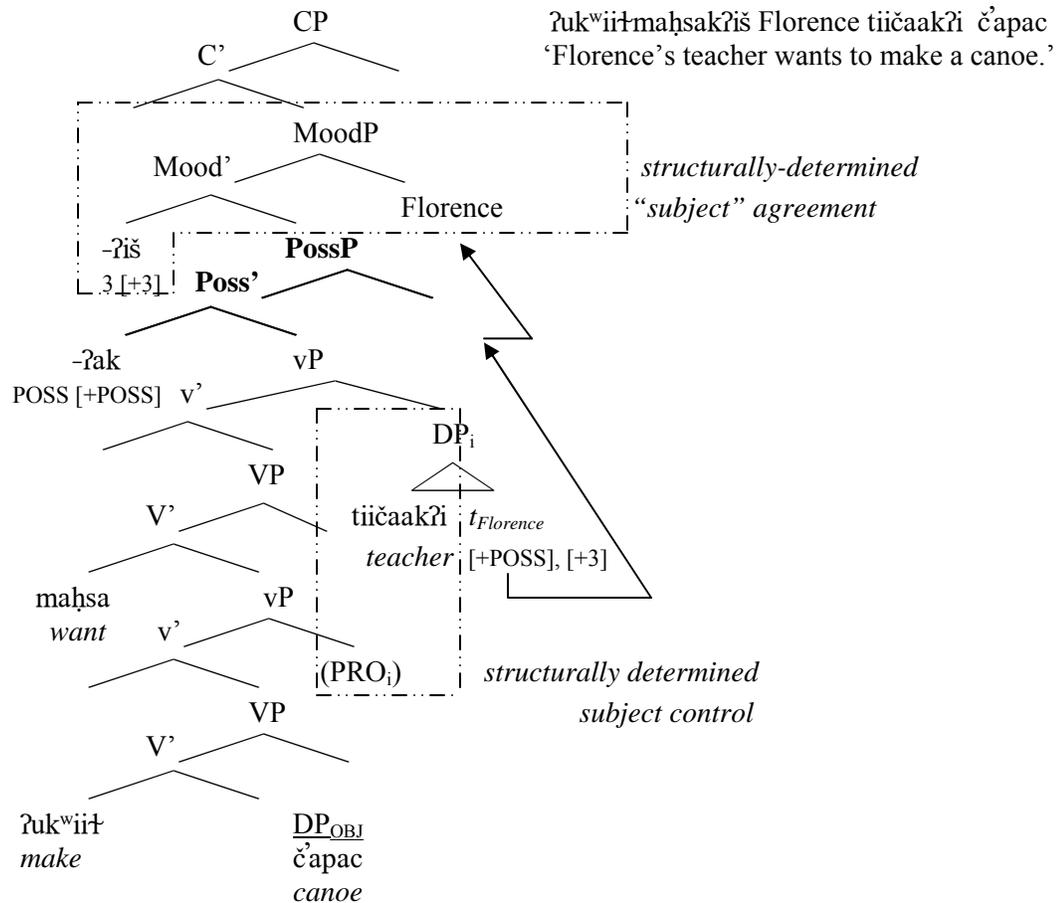
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[46] Disjoint reference is expressed with the addition of the causative marker –*ʔap* .

i.   waɬaakmaḥs**ap**siš Kay mituuni
      waɬaak-maḥsa -**ʔap** -siš   Kay mituuni
      go.to   -want.to-**CAUS**-1S.IND Kay Victoria
      'I want Kay to go to Victoria.'   (Wojdak 2004b)

(the possessive DP *Florence's teacher*) is therefore shown to remain syntactically active in PR form, as though PR has never taken place.

(158)

ʔukʷiiɬmaḥsakʔiš Florence tiičaakʔi čʼapac
'Florence's teacher wants to make a canoe.'

```
                      CP
                 C'
               MoodP
          Mood'
                        Florence        structurally-determined
        -ʔiš                             "subject" agreement
        3 [+3]    PossP
              Poss'
        -ʔak           vP
        POSS [+POSS]  v'
                              DPᵢ
                    VP
              V'      tiičaakʔi  t_Florence
                      teacher   [+POSS], [+3]
        maḥsa   vP
        want  v'
                    (PROᵢ)    structurally determined
              VP                 subject control
        V'
    ʔukʷiiɬ    DP_OBJ
    make       čʼapac
               canoe
```

While a raised possessor occupies the inflectional subject position and determines clausal inflection, the possessive DP occupies the underlying subject position Spec, vP, and controls PRO in the subordinate VP. These effects provide evidence that the underlying subject position as well as the inflectional subject position remain active in PR constructions. The possessor has not "replaced" the possessum as the subject of the clause.

4.3.1.2 Subject WH- questions

In their study of WH- movement in NCN, Davis and Sawai (2001) observe that throughout the language noun incorporation is restricted to objects, except in the presence of the auxilliary *-aq*, which incorporates subjects. Because NCN WH- words are bound morphemes, that is, they cannot be expressed without incorporating into a predicate, this incorporating auxiliary is the only way to express a WH- question word referring to a subject (159).

(159)   Ɂačaq̱ḫ kaapap John
             Ɂača -aq -ḫ   kaapap John
             who -AUX -3INT like   John
             'Who likes John?'   (Davis and Sawai 2001:130)

Without the auxiliary, subject incorporation is bad (160).

(160)   * ƚačaɁiicitḫ suuḫaa
                Ɂača-Ɂiic -mit -ḫ   suuḫaa
                who-eat -PST-3INT salmon
                'Who ate the salmon?'   (Davis and Sawai 2001:130)

The authors argue that this follows from a restriction on all incorporation; that the
predicate must c-command the element that it incorporates. A subject WH- word is
assumed to be generated in the external argument of the verb, and so it is too "high" to
directly incorporate into its predicate. The verbal auxiliary, however, occupies a position
directly above the predicate, and so a WH- subject, through movement, can incorporate
into it.

   Therefore, WH-questions with the auxilliary *-aq* provide a test for subjecthood. If
a raised possessor alone assumes all the functions of subjecthood, and the underlying
subject correspondingly loses its subjecthood, then it would be expected that the PSR, but
not the underlying subject, could be targeted in a WH-question with *-aq*. Indeed, this
scenario has been proposed for possessor raising in other languages, such as Japanese and
Sinitic (Payne and Barshi 1999). However, NCN data indicate that this is not the case:

(161)   Ɂaqaqukk kiṅucak
         Ɂaq -aq -uk -k   kiṅuc-ak
         what-AUX-POSS-2S.INT   blue -DUR
         'What of yours is blue?'   (*PSM reading*)

(162)   Ɂaqaʕaƛukk ḫinin
         Ɂaq -aq -Ɂaƛ -uk -k   ḫinin
         what-AUX-TEMP-POSS-2S.INT   arrive
         'What of yours arrived?' (*PSM reading*)

In possessor raising constructions, a subject WH-question targets the underlying subject,
not the raised PSR: this indicates that the entire possessive DP remains active as the
occupant of the predicate's external argument. Despite determining subject agreement as
in (161)-(162), the raised possessor alone cannot be deemed the "subject" of PR
sentences.

4.4 Further predictions

Three remaining predictions emerge from the analysis I propose. These are (i) restriction
to subjects, (ii) lack of constituency between the possessor and the possessum, and (iii)
clause-boundedness.

4.4.1 Restriction to subjects

In the structures presented in (4.3), the occurrence of the possessive clitic on the predicate is predicted to attract the nearest possessor to its Spec position, in order to check a feature [+POSS]. Assuming the Minimal Link Condition (Chomsky 1995), in which shorter derivations are preferred over more distant ones, I predict that the subject (as external argument of the predicate) should always be attracted, rather than the object (the internal, "lower" argument of the predicate). This prediction is borne out: only subjects may be targeted by PR.

The POSS in (163b) cannot be associated with the object argument. In cases where the only available possessum is an object, the raised version of a possessive utterance is ungrammatical for a possessed object interpretation:

(163) a.　　ńaatsiiciƛitʔiš Lucy čʼapacukqs
　　　　　　 ńaatsii-šiƛ -mit-ʔiš　　Lucy čʼapac-uk -qs
　　　　　　 see 　-PERF-PST-3IND　Lucy canoe-POSS-1S
　　　　　　 'Lucy saw my canoe.'

　　　 b.　# 　ńaatsiiciƛ**uk**ʷitsiš čʼapac Lucy
　　　　　　 ńaatsii-šiƛ -**uk** -mit -siš　　čʼapac Lucy
　　　　　　 see 　-PERF-**POSS**-PST-1S.IND　canoe Lucy
　　　　　　 * '[Lucy]$_{Subj}$ saw [my canoe]$_{Obj.}$' / ✓'[My canoe]$_{subj}$ saw [Lucy]$_{Obj.}$'
　　　　　　 Consultant's first response: "Why, when did it get eyes!?"

In contrast with previous claims, possessor raising is restricted neither to the subjects of intransitive predicates (Lee 2003) nor to that of non-agentive predicates (Braithwaite 2003).

(164) ʔu-yuʔaaɫ-uk-siš hupkumɫ ʕiniiƛ　　　　　　　　　　　*transitive predicate*
　　　 ʔu-yuʔaaɫ-**uk** -**siš**　　 hupkumɫ ʕiniiƛ
　　　 ∅- find 　-**POSS-1S.IND** ball 　　　dog
　　　 'My dog found a ball.'　　　　　　　　　　　　　　　　　　　(Wojdak, p.c.)

(165) ńačiƛ**uk**ʷitsiš ʕiniiƛ tiiča　　　　　　　　　　　　　　　*agentive subject*
　　　 ńačiƛ -**uk** -mit -siš　　 ʕiniiƛ tiiča
　　　 bite 　-POSS-PST-1S.IND dog 　teacher
　　　 'My dog bit a teacher.'

(166) qaḥsaapukʷaḥ ḥawiɫaƛ muwač[47]
　　　 qaḥ-sap -uk -maḥ ḥawiɫaƛ muwač
　　　 die-CAUS-POSS-1S.IND boy 　　deer
　　　 'My son killed a deer.'

In fact, there is no apparent restriction on the occurance of possessor raising with respect to verb type at all.

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[47] This is from the Ucluelet dialect.

(167)   ʔucqakukʔicuuš   *Stative*
         ʔucq-ak -uk –ʔicuuš
         fog -DUR-POSS-2PL.IND
         'Yours [your place] is foggy.'

(168)   nunuukukʷitʔiš ʔuuštaqyu   Rachel   *Unaccusative*
         nu-nuuk-uk -mit –ʔiš ʔuuštaqyu Rachel
         R-sing-POSS-PST-3IND healer   Rachel
         'Rachel's doctor was singing.'

(169)   capxšiƛukʔišʔaⱡ čʼaʔak   *Unergative*
         capx-šiƛ -uk -ʔiš -ʔaⱡ čʼaʔak
         boil -PERF-POSS-3IND-PL   water
         'Their water started boiling.'

(170)   haʔukukʔick   čims   *Intransitive*
         haʔuk-uk -ʔick   čims
         eat   -POSS-2S.IND bear
         'Your bear is eating.'

      Nuu-chah-nulth possessor raising is furthermore possible from the derived subject
of a passivized predicate.

(171)   a.   tʼičiƛʔiš Adam m̓uksʔiʔakʔi   *non-raised*
              tʼičiƛ -ʔiš   Adam m̓uksʔi-ʔak -ʔi
              throw-3IND Adam rock   -**POSS**-3
              'Adam threw his (own or another's) rock.'

        b.   tʼičiʔatukʷitʔiš Adam m̓uksʔi   *raised with passive subject*
              tʼičiƛ -ʔat -uk -mit –ʔiš   Adam m̓uksʔi-ʔi
              throw-**PASS**-**POSS**-PST-3IND Adam rock   -DET
              'His/ Her rock was thrown by Adam.'

        c. # tʼičiƛukʔiš Adam m̓uksʔi   *raised non-passive*
              tʼičiƛ -uk -ʔiš   Adam m̓uksʔi
              throw-**POSS**-3IND Adam rock
              * 'Adam threw his rock.'   / ✓ 'Adam's rock threw something.'

In fact, in cases like (171b), passivization is actually forced in order to allow possessor
raising, even though passive would normally be dispreferred due to animacy restrictions
(2.3.5). Since passivization promotes a "lower" argument to a subject position[48], this
provides supporting evidence that PR must take place only from subject positions.

---

[48] The target of a derived passive subject is clearly not the external subject position of the verb, where e.g.
an agent theta role is assigned (4.3.1). Therefore PR from a passive subject indicates a third position with
structural "subject" properties. This position must be above the verb but still lower than a clausal PossP.

The NCN possessor raising construction is therefore associated exclusively with subject arguments; however it is not limited to any particular type of subject.

4.4.2   Lack of possessum-possessor constituency

The proposed analysis for Nuu-chah-nulth possessor raising claims that the possessor extracts out of a possessive DP to check a feature [+POSS] in Spec, PossP. This entails that the possessive DP and the possessor should no longer act as a single constituent. This prediction is borne out.

In contrast with non-raised forms (3.3), the PSM and PSR in a raised construction do not form a constituent.

Non-raised; element inserted between PSM and PSR is ungrammatical:

(172) *ʔukʷiiɬmaḥsaʔiš <u>Florence</u> čʼapac <u>tiičaakʔi</u>
      ʔukʷiiɬ-maḥsa-ʔiš <u>Florence</u> čʼapac <u>tiiča -ak -ʔi</u>
      make -want -3IND <u>Florence</u> canoe <u>teacher-POSS-3</u>   (repeated from 89d)

PR; element inserted between PSM and PSR is grammatical:

(173)✓ʔukʷiiɬmaḥsat<u>uk</u>ʔiš <u>Florence</u> čʼapac <u>tiičaakʔi</u>
      ʔukʷiiɬ-maḥsa-ʔat <u>-**uk**</u> -ʔiš <u>Florence</u> čʼapac <u>tiiča -ʔak -ʔi</u>
      make -want -PASS-**POSS**-3IND <u>Florence</u> canoe <u>teacher-POSS-3</u>
      '<u>Florence's teacher</u> wants to make a canoe' (for Florence).

Whereas another element cannot be inserted between the PRM and PSR in the non-raised example (89d), repeated here as (172), the same test shows the PSM and PSR no longer form a constituent in the possessor raised construction. (173).

4.4.3   Possessor raising is clause-bound

The possessor raising analysis of (4.3) relies crucially on the A-movement of the possessor DP out of a syntactic argument and into a clause-level specifier position. This should be sensitive to movement restrictions, and in NCN movement is strictly local (Davis and Sawai 2001). This indeed is reflected in the data.

Possessor raising is clause-bound: a possessive clitic cannot enter into a syntactic dependency with an element beyond clause boundaries. In example (174a-b) below, when the possessive marker *–uk* is placed above the relative pronoun in the domain of the matrix predicate, the possessive relation must be interpreted within the matrix clause.

(174)a. ƛ̓ikšiƛ̓itsiš čakup yaqitii pawaɬsap hiishiisačʼak<u>ukqs</u>
      ƛ̓ik–šiƛ̓ –mit –siš čakup yaq-it –ii pawaɬ-sap hiishiisačʼak-<u>uk</u> -<u>qs</u>
      hit-PERF-PST-1S.IND man who-PST-3I.REL lose -CAUS axe   -**POSS-1S**
      'I hit the man who lost <u>my axe</u>.'

b. x̌ikšix̌itsiš čakup yaʕatuk^witiis pawałsap̓at hiishiisač̓ak

　x̌ik-šix̌ -mit -siš 　čakup yaq-ʔat -uk -mit -iis 　　pawał-sap̓ -ʔat hiishiisač̓ak

　hit -PERF-PST-1S.IND man who-**PASS-POSS**-PST-1S.I.REL lose-CAUS-PASS axe

　'I hit the man who lost <u>my axe</u>.' ('I hit the man by whom <u>my axe</u> was lost.')

c. x̌ikšix̌**uk**^witsiš čakup yaqitii pawałsap hiishiisač̓ak

　x̌ik-šix̌ -**uk** -mit-siš 　　čakup yaq-mit-ii 　　pawał-sap hiishiisač̓ak

　hit-PERF-**POSS**-PST-1S.IND man who-PST-3I.REL lose -CAUS axe

　* 'I hit the man who lost <u>my axe</u>.'/ ✓'<u>My husband</u> ⁴⁹ hit [him] who lost an axe.'[50]

The available interpretation of (174c) is due to the possessive clitic's association with the subject of the main clause, instead of that of the relative clause. Possessor raising is thus shown to be subject to a strict locality condition, like other movement rules in NCN.

4.5　Extraction of the possessor from the subject DP

Possessor raising is possible only where there is no determiner present on DP. First, the determiner can not co-occur with possessive marking on a DP.

(175) *ʔu-yuʔaałuk^witsiš ʕiniix̌**uk**qsʔi hupkumł

　　ʔu-yuʔaał-uk -mit -siš 　　ʕiniix̌-**uk** -qs-ʔi hupkumł

　　∅-to.find-POSS-PST -1S.IND dog -POSS-1S-DET ball

　　* 'My dog found the ball.'

This generalization extends to possessor raising cases: in other words, a determiner can never co-occur with POSS on a possessum, whether the POSS occurs in the clausal or in the DP-domain[51].

(176) *wiwiišʔaqx̌ukʔiš 　t̓aňaʔi tiiča

　　wi-wiiš -ʔaqx̌ -uk -ʔiš 　t̓aňa -ʔi 　tiiča

　　R -lazy-TEMP-POSS-3IND child -DET teacher

　　* 'The teacher's child is lazy.'

　　Consultant: "In English, it would sound like it's saying, like you don't really know whose child it is, eh? It's *the child*, but I don't know whose."

---

[49] A possessive on *man* or *woman* indicates one's *husband* or *wife*, respectively.

[50] My consultant tells me that "*My husband hit the one who lost an axe*," would be more clearly expressed thus:

i.　　x̌ikšix̌uk^witsiš čakup ʔuhtaa yaqitii pawałsap hiishiisač̓ak

　　x̌ik -šix̌ -uk -mit -siš 　čakup ʔuḥ-taa 　　yaq-it -ii pawał-sap hiishiisač̓ak

　　hit -PERF-POSS-PST-1S.IND man one-to.smone who-PST-3I.REL lose -CAUS axe

　　'My husband hit the one who lost an axe.'

[51] As is expected, adding the determiner to the possessor is fine, and leads to an unmarked PSM-PSR order interpretation.

i.　　wiwiišʔaqx̌ukʔiš t̓aňa tiičaʔi

　　wi-wiiš-ʔaqx̌ -uk -ʔiš 　t̓aňa tiiča -ʔi

　　R -lazy-TEMP-POSS-3IND child teacher-DET

　　✓ 'The teacher's child is lazy.'

(177) a.　　ƛuɫ-uk-ʔiš　　huupukʷas　Lucy
　　　　　　ƛuɫ -uk -ʔiš　　huupukʷas　Lucy
　　　　　　good-POSS-3IND　car　　　　　Lucy
　　　　　　'Lucy's car is nice/ sharp.'

　　　b.　*　ƛuɫukʔiš　　huupukʷasʔi　Lucy
　　　　　　ƛuɫ -uk -ʔiš　　huupukʷas-ʔi　Lucy
　　　　　　good-POSS-3IND　car　　　**-DET** Lucy
　　　　　　* 'Lucy's car is nice/ sharp.'

(178) a.　　caapxšiƛʔaƛukʔiš　čaʔak Ryan
　　　　　　caapx-šiƛ –ʔaƛ -uk –ʔiš　čaʔak Ryan
　　　　　　boil -PERF-TEMP-POSS-3IND　water　Ryan
　　　　　　'Ryan's water started boiling.'

　　　b.　*　caapxšiƛʔaƛukʔiš　čaʔakʔi Ryan
　　　　　　caapx-šiƛ –ʔaƛ -uk –ʔiš　　čaʔak -ʔi　　Ryan
　　　　　　boil　-PERF-TEMP-POSS-3IND　water -**DET**　Ryan
　　　　　　* 'Ryan's water started boiling.'

From this I conclude that the determiner and possessive agreement are related, and that furthermore the determiner blocks PR.

　　　　This effect has been observed before in a cross-linguistic context. Cinque (1980) and Longobardi (1991) observe that an overt D blocks possessor extraction in Romance, and propose an analysis whereby SPEC, DP serves as an 'escape hatch' for the possessor. Since NCN shows the same effect, I will adopt this analysis, and assume that PR in NCN is possible only in cases where Spec, DP is available as an escape hatch.

4.5.2　　Non- inherent relational nouns

As observed above, the determiner –ʔi appears in complementary distribution with possessive marking. Where –ʔi is present in the following data, only a possessed nominal predicate interpretation, whereby the subject is not possessed, is possible. Where –ʔi is absent, only a possessor-raised interpretation, whereby the subject must be possessed (and is often interpreted as relational), is possible.

(179) a.　　ḥaẃiɫuksiš　čakupʔi
　　　　　　ḥaẃiɫ -uk –siš　　čakup -ʔi
　　　　　　chief -POSS-1S.IND　man　-DET
　　　　　　'The man is <u>my chief</u>.'

　　　b.　　ḥaẃiɫuksiš　čakup__
　　　　　　ḥaẃiɫ -uk　–siš　　čakup -__
　　　　　　chief -POSS -1S.IND　man
　　　　　　<u>My husband </u>is a chief.' / * 'The/A man is my chief.'

(180) a. tiičaẁiťasukʔick ɫuucmaʔi
           tiiča -ẁiťas -uk -ʔick   ɫuucma-ʔi
           teacher -plan.to -POSS -2S.IND woman-<u>DET</u>
           'That woman is going to be <u>your teacher</u>.'

       b. tiičaẁiťasukʔick ɫuucma__
           tiiča -ẁiťas -uk -ʔick   ɫuucma-__
           teacher -plan.to -POSS -2S.IND woman
           '<u>Your wife</u> is going to be a teacher.' /
           * 'That woman is going to be <u>your teacher</u>.'

This indicates that these forms are not inherently relational; rather the possibility of a possessed interpretation (expressed as possessor raising) is related to the presence or absence of the determiner *-ʔi*.

4.6   Contrasting cross-linguistic analyses

In this section the analysis proposed above for Nuu-chah-nulth is compared to two other analyses of possessor raising. First, the Korean Multiple Accusative (or "double-object") construction is discussed in light of Tomioka and Sim's (2004) base-generation account. Second, the Japanese double nominative (or "double subject") construction is described as Ura's (1996) syntactic analysis applies to it.
    Although the empirical generalizations for all three languages are quite diffrent, it is shown that the analyis as proposed for Korean cannot be extended to the facts of Nuu-chah-nulth, while the analysis proposed for Japanese can.

4.6.1   Tomioka and Sim's semantic account for Korean

Tomioka and Sim (2004, henceforth T&S) suggest a base-generation account to explain the facts of the Korean Multiple-Accusative possessive construction without movement of the possessor. They argue that the "raised" form is neither syntactically derived from nor equivalent to the alternate (single-marked accusative) form. The data in this section is theirs:

(181) a *GEN-ACC possessive phrase*

          Vampire-ka Buffy-**euy** son-**lul** ttayli-ess-ta
          vampire-nom Buffy-**gen** hand-**acc** hit-past-decl
          'The vampire hit Buffy's hand.'

       b. *ACC-ACC possessive phrase*

          Vampire-ka Buffy-**lul** son-**lul** ttayli-ess-ta
          vampire-nom Buffy-**acc** hand-**acc** hit-past-decl
          'The vampire hit Buffy on the hand.'

On the contrary, T&S assert that in Multiple-Accusative cases such as (181b) above, the accusative appears on both the possessor and possessum because both syntactically *are* "objects." This is possible in that both elements are posited to be independent arguments of different recursive verbs.

(182)   *Tomioka and Sim's recursive VP structure*

```
                    VP1
                 /        \
         possessor         V1'
                        /        \
                 VP2               V1
              /      \
      possessee       V2
```
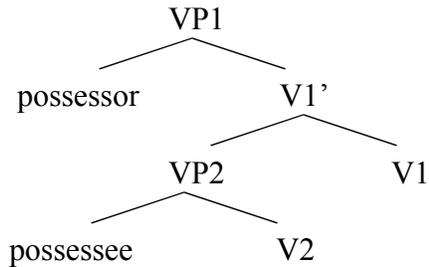
In support of a recursive VP structure, T&S point out that both possessor and possessum NP can be relativized (183), and that the possessum NP can be modified (184).

(183)   *Relativizing the PSM is possible*

[Chelswu-ka   Sunhee-lul t_i ttali-n] ppam$_i$
Chelswu-nom Sunhee-acc   hit-rel   cheek
'The cheek where Chelswu hit Sunhee.'

(184)   *Modifying the PSM is possible*

Chelswu-nun Sunhee-lul tachi-n   son-ul   cap-ass-ta
Chelswu-top Cunhee-acc hurt-mod hand-acc grab-past-decl
'Chelswu grabbed Sunhee by the injured hand.'

It is assumed that either both VPs are identical and one deletes at PF, or that the higher verb is a light verb, while the lower verb is a lexical verb. It is further posited that there is a 'material' whole-part relation between the two VP levels. That is, the entire structure combines semantically so that the PSM is a material part of the whole PSR.

Although T&S's analysis provides facinating insight into the structure of Korean, it cannot be extended to account for NCN. The effect of the recursive VP structure to only allow one form (in NCN, this is raising of the PSR to Spec, MoodP), and not the other (in NCN, raising of the entire possessive DP to Spec, MoodP) is exactly the property of Korean that T&S intend to capture. They argue that the Korean Multiple Accusative is neither formed from movement of the possessor nor is it derived from the single-accusative form. They have three reasons why this should be the case for Korean: (i) idioms do not hold their meaning across both forms, (ii) the Multiple Accusative form is only possible for inalienable possession, and (iii) in both Korean and Swahili, amputated limbs cause different intuitions about possession when expressed in the different forms. These generalizations do not hold in NCN.

Idioms do hold meaning across PR and non-raised forms in NCN.

(185) a. *non-raised:*

ƛuyačiƛʔiš ɫiṁaqstatqin
ƛuɫ –ya –šiƛ –ʔiš ɫiṁaqsti-**ʔat**-qin
good-CONT-PERF-3IND thoughts-**INAL**-1PL
'We are happy/ feeling good.' (Literally: 'Our thoughts are good.')

b. *possessor-raised:*

ƛuyačiʔatniš ɫiṁaqsti
ƛu –ya –šiƛ –**ʔat** -niš ɫiṁaqsti
good-CONT-PERF-**INAL-**2PL.IND thoughts
'We are happy/ feeling good.' (Literally: 'Our thoughts are good.')

Secondly, as illustrated throughout Chapter 3, alienable possession is expressed through raising in NCN as readily as inalienable possession, unlike in Korean.

Third, in Korean, the "marked" Multiple Accusative construction cannot be used to express ownership of a limb that has been amputated. However, this is perfectly possible in NCN.

(186) a. *non-raised:*

č̓iʔatamitwaʔiš Vincent p̓ap̓ii**atʔi** [52]
či – ʔatap – mit – waʔiš Vincent p̓ap̓ii –**ʔat-ʔi**
cut-away.from-PST- 3QUOT Vincent ear-**INAL-3**
'(It is said) Vincent cut his own ear off.'

b. *possessor-raised:*

č̓iʔatapʔat**uk**waʔiš Vincent p̓ap̓ii___
či – ʔatap – ʔat – **uk** – waʔiš Vincent p̓ap̓ii ___
cut-away.from-PASS -**INAL**- 3QUOT Vincent ear
'(It's said) Vincent's ear got cut off.'

Although it has been argued that the Korean Multiple Accusative construction is a form of possessor raising (Choe 1987, Cho 2000) in that the possessor and possessum do not form a single constituent, Tomioka and Sim's recursive VP analsis cannot be readily extended to the possessor raising contruction in NCN. The differing facts of Korean and

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[52] The parallel form of (186a) which is both passive and non-possessor-raised was judged to express "It is said Vincent's ear was cut off," equally well, but the consultant greatly preferred that Vincent or some third party be the subject of the sentence, instead of the ear itself. This is in line with the animacy hierarchy effects described in 2.3.5 and 2.3.6, and is not parallel to the Korean intuition such that Vincent should no longer own the ear.

(i) ? č̓iʔatap̓atwaʔiš p̓ap̓ii**atʔi** Vincent
či –ʔatap –ʔat –mit –waʔiš Vincent p̓ap̓ii-**ʔat-ʔi**
cut-away.from-PASS-PST- 3QUOT Vincent ear-**INAL-3**
'It is said Vincent's ear was cut off.'

NCN therefore present a challenge for any universal analysis of external possessive constructions.

4.6.2   Ura's account of Japanese

A PSR and PSM are both case-marked in Japanese. When they are within the same subject DP, the PSR takes genitive case and the PSM (the head of the phrase) takes nominative case. However, the PSR can also take nominative case when it is no longer in the same DP. On the surface, Japanese PR data appears to be much like NCN data. Examples of double-nominative marking appear with both alienable and inalienable possession. In genitive-nominative constructions, the PSR and PSM cannot be divided by a modifier: they are a single constituent. In the double-nominative cases, the PSR and PSM *can* be divided by a modifier: they are *not* a single constituent. The data in this section are from Ura (1996).

(187)   a.   [$_{DP}$ Mary –no   kami]-ga   naga-i
             [Mary –GEN   hair] –NOM long-be
             'Mary's hair is long.'

        b.   Mary-ga$_k$ [$_{DP}$ t$_k$ kami]-ga   naga-i
             Mary-NOM   [hair]-NOM long-be
             'Mary's hair is long.'

(188)   a.   [$_{DP}$ John –no   kuruma]-ga   seibifuryoo-da
             [John –GEN   car] –NOM ill-conditioned-be
             'John's car is ill-conditioned.'

        b.   John –ga   kuruma-ga   seibifuryoo-da
             John –NOM   car–NOM   ill-conditioned-be
             'John's car is ill-conditioned.'

Ura (1996) proposes an analysis of Japanese possessor raising based on a multiple feature checking model set within the framework of the Minimalist Program of Chomsky (1995). In particular, Ura proposes a Principle of Grammatical Function Splitting (Ura refers to Keenan 1987, Comrie 1989, and Bhat 1991 as precursors of his analysis). In brief, some of the grammatical functions associated with a certain grammatical relation may be distributed between several syntactic positions: one to many and many-to-one checking relations therefore may hold between formal features, and these features can enter into multiple checking relations. Ura proposes for Japanese that TenseP, the projection which hosts the "higher" subject, may arbitrarily enter into multiple case-feature checking relations. First, the entire possessive phrase moves to check nominative case at TenseP. Once the nominative case of the possessive phrase is checked, this feature is deleted, and the PSR DP becomes the closest element to TenseP with an unchecked nominative feature. Then, the PSR DP moves to a higher Spec of TenseP to check its nominative case feature. Ura posits therefore that languages allowing subject possessor

raising have TensePs that can enter into multiple feature relations, while languages that disallow subject possessor raising do not.

As with Korean, generalizations between Nuu-chah-nulth and Japanese possessive constructions differ. Japanese has what is known as a MAJOR SUBJECT position, whose occupant (i) is assigned a "topic" or "focus" meaning, and (ii) is base-generated, with nominative case, in clause-initial position. This differs from the (nominative-marked) subject of the main predicate of the same clause. Therefore, only inalienable possessors are posited to exit a host DP via possessor raising in Japanese (187); while alienable possessors (188) are posited to be base-generated above a host DP as a MAJOR SUBJECT.

Given that a clause can have only *one* MAJOR SUBJECT, it is predicted that the addition of a nominative-marked additional "subject" to a double-nominative *alienably* possessive construction should be ungrammatical. It is further predicted that a double-nominative *inalienably* possessive construction should be fine in this case, because the second nominative item is due to possessor raising and the third nominative-marked item is the only MAJOR SUBJECT. These predictions are borne out in Japanese data, showing that alienable possessors are base-generated apart from their possessums, but inalienable possessors must separate via movement. Only inalienable possession can be expressed with possessor raising in Japanese.

Ura's analysis of Japanese possessor raising is based on the assumption that alienable and inalienable possession are expressed in different structures in Japanese. Crucially, only inalienable possessors can be generated within a possessive phrase with nominative, rather than genitive, case. In Nuu-chah-nulth, there is no evidence to support the presence of a MAJOR SUBJECT position; both alienable and inalienable possessors must raise out of their possessed host DP.

Furthermore, Ura proposes that both the possessor and possessum undergo feature-driven movement in Japanese. In Nuu-chah-nulth complex predicates however, the underlying subject determines subject control of a lower PRO (4.3.1.1), an ability that is assumed to be related to its structural position in Spec, vP. If both the PSM and PSR were to raise out of Spec, vP, it is unclear how the PSM would continue to determine subject control. Therefore, instead of a higher projection that can check multiple features, I propose that the PSR DP in NCN is assigned multiple features that must be checked by multiple higher projections, allowing the possessum to remain in situ.

While the details of possessor raising differ between Nuu-chah-nulth and Japanese for independent reasons, I adopt in part Ura's mechanism to explain possessor raising in Nuu-chah-nulth.

4.7   Discussion and outstanding issues

This chapter has provided an analysis that accounts for the major characteristics of Nuu-chah-nulth possessor raising. First, I have proposed that the possessive clitic *-uk/-(ʔ)ak/-ʔat* projects a Possessive Phrase which may appear on the predicate, a possessed argument, or on both. This PossP has a possessive feature that is shared only by the DP of a possessor. Therefore, where the PossP appears higher than a possessive phrase, the possessor DP must extract out of its possessive DP host to check its possessive feature at Spec, PossP. From this position, the possessor DP is the closest

available element to check an agreement feature with Mood, and in so doing it determines predicative subject agreement. This proposed movement predicts the core generalizations of possessor raising, which are (i) the possessive clitic appears on the predicate, (ii) predicative subject agreement matches the possessor, rather than its possessed subject, (iii) PR can only target subjects, (iv) the possessor and possessum do not form a single constituent, and (v) the construction is clause-bound.

The underlying generalization captured by the existence of a possessive feature is that the highest projection of the possessor constituent differs from the highest projection of the entire possessive DP, and this allows the possessor to move out of the DP containing its possessum. This is the minimal assumption required for possessors to appear in the clausal domain. Although mechanically and descriptively adequate to explain the movement of the possessor out of the possessed subject, the problem of *why* it should be possible to generate a "nominal" projection PossP in the clausal domain remains unresolved. As this aspect of the problem is beyond the scope of this thesis, I leave this issue aside for future research.

5   Conclusions

This chapter presents a summary of my proposed analysis (5.1) and describes the implications of possessive constructions for the structure of Nuu-chah-nulth (5.2). I conclude with a brief typology of cross-linguistic possessor raising constructions, among which NCN appears to be unique (5.3).

5.1   Summary

This thesis proposes the first detailed analysis of NCN possessive structures and derivations, including the under-described and typologically unusual PR construction.
There are five main generalizations that characterize NCN PR:

i   The possessive clitic *-uk/-(?)ak* or *-(?)at* appears on the predicate, rather than on the possessed argument.
ii   The predicative subject agreement matches the person and number of the possessor, rather than the possessed subject.
iii The possessor and possessum do not form a single constituent.
iv   PR can only take place from subjects; objects are prohibited.
v   Possessor raising is clause-bound.

I have proposed that the possessive clitic heads a functional projection PossP. Because this clitic may appear in the clausal domain (in possessor raising and possessed nominal predicate constructions), in the DP domain (in non-raised possessive forms), or in both (in possessive doubling), I assume that the PossP may occur in either the clausal or DP domain.
I have further proposed that the possessive clitic has a feature [+POSS], which is checked when a possessor DP with the same feature raises into its specifier position. Once the possessor has extracted out of the possessive DP, it is the closest element to MoodP, the position that structurally determines clausal subject agreement. Hence the possessor DP, rather than the possessed subject DP, raises to check agreement features at [Spec, Mood].
The possessed subject remains in [Spec, v][53] in the possessor raising form. Therefore, although both the possessor and possessum are generated within the same constituent, they are no longer part of the same constituent after PR has occurred. The determiner *-?i* blocks PR, suggesting that Spec, DP may be the escape hatch through which the possessor raises and that an overt D blocks movement through its specifier.
Subjects, as the external argument of a predicate, will always be closer to a clausal POSS projection than objects. Therefore, given the Minimal Link Condition, subjects should be always preferred over objects as the target of possessive feature checking in the clausal domain. This prediction is borne out in that possessor raising exclusively targets subjects.
Finally, previous analyses of NCN have demonstrated that syntactic movement is strictly local. Therefore, it should come as no surprise that PR is strictly clause bound.

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[53] Or alternatively, the projection that represents the output subject of the passive.

5.2   Implications for the structure of NCN

The adoption of the analysis above results in the following implications for the general structure of Nuu-chah-nulth.

First, the restriction of possessor raising to subjects is a strong argument for a structurally represented asymmetry between subjects and non-subjects (contra e.g. Davidson's 2002 discourse reference-tracking analysis of NCN grammatical functions). This builds on previous observations of subject-object asymmetries, including the morphological agreement asymmetries between subjects and objects (Rose 1981, Nakayama 2001, Davidson 2002, among others), Wojdak's analysis of subject control (2004b), and Davis and Sawai's (2001) observation that noun incorporation is restricted to objects. My syntactic analysis of PR provides an additional argument for a configurational interpretation of these asymmetries. My analysis furthermore refines the structural definition of subjecthood, in that it provides evidence for at least two subject positions: a 'high' inflectional subject in [Spec, MoodP] which determines mood-agreement inflection, and a 'low' thematically-linked subject generated in the [Spec, vP] position. A third A-position, crucially non-thematic, must be available to a promoted passive subject as well.

The ability of the possessor of the subject to determine clausal subject agreement in MoodP is explained herein via A-movement. The success of this approach in accounting for the data provides further evidence for a conventional, hierarchical approach to the structure of the clause in NCN.

5.3   Cross-linguistic typology

The term *possessor raising* denotes a subset of the larger class of constructions known in the typological literature as *external possession.* In a cross-linguistic survey, Payne and Barshi (1999:7) define possessor raising as a family of linguistic constructions in which a possessor with a "semantic or argument-structure dependency on an element within a 'lower' constituent is structurally realized in a 'higher' syntactic unit", such that (i) the possessor and possessum are contained within separate constituents and (ii) the possessor is expressed as a core grammatical relation of the verb (i.e., a subject or an object).

While this definition describes the characteristics of possessor raising for a variety of languages, NCN illustrates that "subject" and "object" cannot be reliably treated as linguistic primitives. Under my analysis, the properties of "subject" are distributed among a number of clausal projections.

Typically, object possessor raising is associated with applicative morphology on the verb, which triggers "promotion" of the possessor of the theme to direct object position, often with concomitant "demotion" of the theme itself to adjunct or "chomeur" status. This type of construction is observed in Bantu (Baker 1988), Salish (Gerdts, 1989, H. Davis, p.c.), European languages (Haspelmath 1999), and Hebrew (Landau 1998), among many others.

(189) *Swahili*

    a.   Juma   a -li -(**ki**) -ata kidole cha Asha[54]   *non-raised*
              1.Juma 1 -PST -(**7**) -cut **7**.finger 7-of 1.Asha
              'Juma cut Asha's finger.'

    b.   Juma   a -li -(m) -kata Asha   kidole   *raised*
              1.Juma 1 -PST -(**1**) -cut   **1**.Asha 7.finger
              'Juma cut Asha's finger.'

    c.   * Juma   a -li -(**ki**) -ata Asha   kidole
              1.Juma 1 -PST -(**7**) -cut **1**.Asha 7.finger
              'Juma cut Asha's finger.'   (cited in Nakamura 1999:4)

(190) *St'át'imcets (Lillooet Salish)*

    Ɂaċx̲ –xit -áš =kʷuɁ   ta =təx̲ʷɁač -š   =a
    see -APPL-3ERG=QUOT   DET=bow   -3POSS =EXIS
    'Then heᵢ saw hisⱼ bow.' (Literally: 'Then heᵢ saw for/to himⱼ hisⱼ bow.')
                                                 (H. Davis, p.c.)

Other languages, such as Chickasaw (Bessell 1992, Munro 1999) and Choctaw (Bessell 1992) (of the Western Muskogean family), Nyulnyulan languages (McGregor 1999), Maricopa (Munro 1999), and Korean (Nakamura 1996), use possessor raising with both objects and subjects. These are less common than languages exhibiting object-only raising, but they are not rare.

(191) *Muskogean Object possessor raising*

    a.   Ofi'-at ihoo   im -pask -ã   apa-tok[55]   *non-raised*
              dog-SUB woman 3/III-bread-OBL eat-PAST
              [NP]-at [NP PSR   PSM] -ã
              'The dog ate the woman's bread.'

    b.   Ofi'-at ihoo-ã   paska im-apa-tok   *raised*
              dog-SUB woman-OBL   bread 3/III-eat-PAST
              [NP]-at [NP PSR]-ã   [NP PSM]
              'The dog ate the woman's bread.'   (Munro 1984[56])

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[54] In this example the numbers indicate affiliation with different noun classes.
[55] Here, numbers refer to person and Roman numerals refer to word classes.
[56] As cited by Bessell (1992:16)

(192)   *Muskogean Subject possessor raising*

        a.   Ihoo im-ofi'at ishto   *non-raised*
                  woman III/3-dog-SUB big
                  [NP PSR PSM]-at
                  'The woman's dog is big.'

        b.   Ihoo-at   ofi'at   im-ishto   *raised*
                  woman-SUB dog-SUB III/3-big
                  [NP PSR]-at   [NP PSM]-at
                  'The woman's dog is big.'

        c.   Ihoo-at   im-ofi'at   ishto   *alternate raised*
                  woman-SUB III/3-dog-SUB big
                  [NP PSR]-at   [NP PSM]-at
                  'The woman's dog is big.'   (Carden, Gorden, and Munro 1982[57])

It has been suggested that languages that allow external possession of a subject must also allow external possession of an object (Haspelmath 1999). However, Japanese (Ura 1996, Nakamura 1996) and NCN clearly defy that generalization. In both languages, possessor raising occurs exclusively with subjects. The Japanese examples in (194) are parallel to the Korean examples in (193); but while the Japanese equivalents of the Korean subject PR cases are grammatical, equivalents of the Korean object PR cases are ungrammatical in Japanese.

(193)   *Korean*

        a.   Chelsoo-**ka** tongsaeng-**ka** sihem-ey hapkyekha-rt-ta   *subject "raised"*
                  Chelsoo-**NOM** brother-**NOM** exam-at pass-PAST-DEC
                  'Chelsoo's brother passed the exam.'   (Choe 1987:100[58])

        b.   *GEN-ACC possessive phrase*

                  Vampire-ka Buffy-**lul** son-**lul** ttayli-ess-ta   *object "raised"*
                  vampire-nom Buffy-**acc** hand-**acc** hit-past-decl
                  'The vampire hit Buffy on the hand.'   (Tomioka and Sim 2004)

(194)   *Japanese*

        a.   John-ga   musuko-ga hito-o   korosi-ta   *subject raised*
                  John-**NOM** son-**NOM**   person-acc kill-PAST
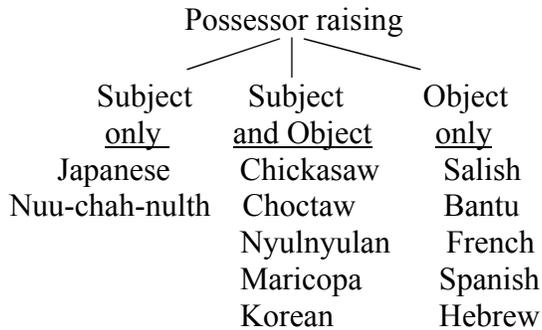   'John's son killed a man.'   (Ura 1996:109)

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[57] As cited by Bessell (1992:2).
[58] As cited by Ura (1996:109).

b. * John-ga   Mary-**o**   atama -**o** nagut -ta   *object raised*
       John-NOM Mary-**ACC** head-**ACC** hit-PAST
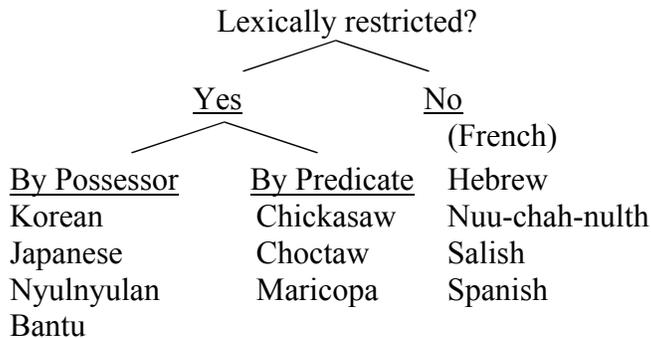   'John hit Mary's head.'   (Ura 1996:110)

The distribution of possessor raising with respect to argument position is summarized in the diagram below:

(195) *possessor raising and argument position*

                      Possessor raising
              _____|_____
            / | \
        Subject   Subject   Object
        only   and Object   only
        Japanese   Chickasaw   Salish
        Nuu-chah-nulth Choctaw   Bantu
                      Nyulnyulan   French
                      Maricopa   Spanish
                      Korean   Hebrew

As I have shown, there are no lexical restrictions on possessors in the NCN PR construction, and furthermore PR may occur with any type of predicate (4.4.1). To my knowledge, this is the only language where this is so. Nearly every language listed thus far is restricted to possessors of inalienable nouns. Korean allows limited exceptions in specific contexts, for example a shirt someone is wearing, such that it is more "part of them" than when it is hanging in the closet (Tomioka 2004). In Hebrew and Spanish, possessor raising is allowed with alienables as well as inalienables, although PR in these languages is restricted to objects, not subjects as in NCN. Chickasaw and Choctaw allow alienable and inalienable subject possessor raising, but in these languages particular verbs are lexically marked as to whether or not they can occur with raising: "...a number of pairs of semantically similar verbs differ according to whether they undergo [raising] or not." (Munro 1999:155).

(196) *Lexical restrictions and possessor raising*

                    Lexically restricted?
              _____|_____
            /   \
          Yes   No
      ____|____   (French)
    /   \
By Possessor By Predicate Hebrew
Korean   Chickasaw   Nuu-chah-nulth
Japanese   Choctaw   Salish
Nyulnyulan   Maricopa   Spanish
Bantu

In the chart above lexically restricted languages are divided into two types: those that are restricted by possessor allow only inalienable possessors to raise, while those that are

restricted by predicate only allow a possessor to raise with certain predicates or types of predicates.

Combining these two parameters of variation, I propose the following table of possessor raising languages:

(197) *Cross-linguistic distribution of possessor raising*

	Subject PR only	**Subject and Object PR (via one construction)**	**Object PR only**
lexically restricted	Japanese	Chickasaw Choctaw Maricopa Nyulnyulan Korean	Bantu
lexically non-restricted	Nuu-chah-nulth	?	French Hebrew Interior Salish Spanish

To my knowledge, there is no language exhibiting a possessor raising construction that is unrestricted both with respect to grammatical function and with respect to lexical restrictions on either the possessor, the predicate, or both. Nuu-chah-nulth appears to be unique in that is restricted to subjects but free of lexical or semantic restrictions.

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Appendix I: Paradigms

A. Mood

Indicative Mood (Ahousaht):

	Singular		**Plural**
1st	–siš		–niš
2nd	–ʔick		–ʔicuuš
3rd	(–ʔiš)		(–ʔiš-(ʔaɬ))

Quotative Mood (Ahousaht):

	Singular		**Plural**
1st	–waʔičʼas		–waičʼin
2nd	–waʔick		–waʔicuus
3rd	(–waʔiš)		(–waʔiš-(ʔaɬ))

Interrogative Mood (Ahousaht):

	Singular		**Plural**
1st	–ḥs		–ḥin
2nd	–k		–ḥsuu
3rd	–ḥ		–ḥ-(ʔaɬ)

B. Possessive agreement

Possessive agreement (Ahousaht):

	Singular	**Plural**
1st	–qs	–qin
2nd	–ʔitk	–ʔitqsuu
3rd	–(ʔi)	–(ʔi-(ʔaɬ))

Makah possessive paradigm:

	Singular		**Plural**
1st	=siš		=dis
2nd	=sic		=saqsa / =sicaa
3rd	=ʾuuc		=ʾuučaɬ

C. Pronouns

Ahousaht independent pronouns:

	Singular	*Plural*
1	siẏa	niiẃa
2	suẃa	siiẃa

Appendix II: Inalienable possession versus the "passive" marker

Since the inalienable possessive morpheme –ʔat is formally identical to what I assume to be the passive morpheme –ʔat, a comparison of the two is in order. It has been noted that Navajo, for instance, uses one marker to denote both inverse perspective and inalienable possession (Horseherder 1998), and in Gitxsan there is a morpheme that indicates both passive and possession (Y. Ikegami, p.c.). For this reason it is especially interesting that Nuu-chah-nulth "passive" and inalienable possession should both be marked by -ʔat.

First, I will show that the two uses of –ʔat cannot be separated by phonological or morphological behaviour, and that they are in complementary distribution. I will outline a unified analysis in which inalienable possession and passive both trigger "promotion" of an internal argument to a higher "subject" position. The principal challenge to this analysis, the behaviour of relational nouns, is described last.

Complementary distribution of passive and inalienable possession

The following chart illustrates the environments where the morphemes -ʔat-as-passive and -ʔat-as-inalienable may appear.

Distribution ∨	"PASS"	"INAL"
on transitive predicates	✓	
on nominal arguments		✓
on nominal predicates		✓
on intransitive predicates	sometimes[1]	✓
on passivized predicates	(N/A)	maybe[2]

-ʔat as a passive marker

The following generalizations have been observed where -ʔat is present on a predicate:

 1. The subject agrees with the theme/patient argument:

(1)   yaaʔak̓apatʔick (ʔuḥʔat) Mary
      yaa -ʔak -ʔap -**ʔat** -**ʔick** (ʔuḥʔat) Mary
      care -DUR -CAUS -**PASS -2S.IND** (by)   Mary
      'You are loved by Mary.'/'Mary loves you.'   (adapted from Kim 2000:3)

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[1] Nakayama (1997b, 2001) presents a list of previously undocumented occurrences of -ʔat on intransitive verbs as evidence against a syntactic passive. Rose and Carlson (1984) furthermore show occurrences of -ʔat-as-passive in non-transitive idiomatic use where no parallel active form is evident. However, Woo (p.c.) points out that those seeming counterexamples are all idiomatic, or involve meteorological or 'psych' predicates, which are commonly found cross-linguistically in passive-only form.
[2] See data in section 4.1.2 where –ʔat appears as -uk on passivized predicates.

2. Its presence is associated strictly with transitive verbs, with few principled exceptions (c.f. Rose and Carlson 1984, Nakayama 1997b, 2001).

3. The preposition *ʔuḥʔat* ('by') optionally introduces the agent argument, if present.

(2)   ṁaṁaaqaɬhiʔanitʔiš Mary (ʔuḥʔat) John
     ṁa-ṁaa -qaɬhi -ʔat - mit - ʔiš   Mary (ʔuḥʔat) John
     R bite -leg   -**PASS** -PST -3IND Mary (**by**)   John
     'Mary was bitten (on the leg) by John.'

(3)   kaapapšiʔanitʔiš Ken
     kaapapšiƛ-ʔat   -mit -ʔiš   Ken
     love   -**PASS** -PST -3IND Ken
     'Ken was loved./ (Someone) loved Ken.'   (adapted from Kim 2000:9)

4. The alternation between active and passive voice in discourse is constrained by an animacy hierarchy, in that for instance 1/2 person elements are dispreferred, if not prohibited, as the subject of a passive (4) or object of an active (5) sentence (2.3.5).

(compare (3) above):

(4) *   yaaʔaḵaṗatʔiš Mary suẇa
     yaa -ʔak -ʔap -ʔat -ʔiš   Mary suẇa
     care -DUR -CAUS -PASS -3IND   Mary 2S
     'Mary is loved (by) you.'   (adapted from Kim 2000:5)

(5) *   yaaʔaḵapʔiš Mary suẇa
     yaa -ʔak -ʔap -ʔiš   Mary suẇa
     care -DUR -CAUS -3IND   Mary 2S
     'Mary loves you.'   (adapted from Kim 2000:5)

Finally, passive -*ʔat* does not appear on stative predicates (including nominals).

-ʔat as an inalienable possession marker

Recall the essential characteristics of possessive -*ʔat* when it appears in the clausal domain:

1. The predicate agrees with the possessor, rather than the possessed subject.

(6)   huumhuumats tiičma
     R- huum   -**ʔat** -**siš**   tiičma
     in.up/down.motion-**INAL** -**1S.IND** heart
     'My heart is beating fast.'

(7)   yaaʔak̓ats ƛišƛin
        yaa -ʔak - **ʔat** -**siš**   ƛišƛin
        sore -DUR -**INAL** - **1S.IND** lower.leg
        'My feet are sore.'

  2. Constituency between a PSR and PSM is lost.

(8)   a. ✓ k̓way̓aaʔap̓atukʔiš **qay̓upta John** (ʔuḥʔat) čims
               k̓way̓a -ʔap -ʔat -uk -ʔiš   **qay̓upta John** (ʔuḥʔat) čims
               broken-CAUS-PASS-INAL -3IND **arm   John** (by)   bear
               '**John's arm** was broken by a bear.'

        b. ✓ k̓way̓aaʔap̓atukʔiš **qay̓upta** čims **John**
               k̓way̓a -ʔap -ʔat -uk -ʔiš   **qay̓upta** čims **John**
               broken-CAUS-PASS-INAL -3IND **arm**   bear **John**
               '**John's arm** was broken by a bear.'

Also, unlike its passive counterpart, *–ʔat*-as-possession must refer to *nominal* predicates, as in (9).

(9)   .   **č̓ič̓iisaqḥtumʔat**waʔiš ʔiiḥkumcʔatʔi
                č̓ič̓iisaqḥtum-ʔat -waʔiš   ʔiiḥkumc-ʔat -ʔi
                toe   -**INAL**-3QUOT   thumb-INAL -3
                'Now his thumb **is his toe**.'[3]

    First and second-person elements are not eligible to be inalienably possessed, therefore animacy effects cannot be tested in inalienable contexts.
    It could be that the parallels between "passive" and "possessive" *–ʔat* are coincidental, as is their homophony. However, a unified account would obviously be more satisfying, and, at least in principle, seems quite plausible.
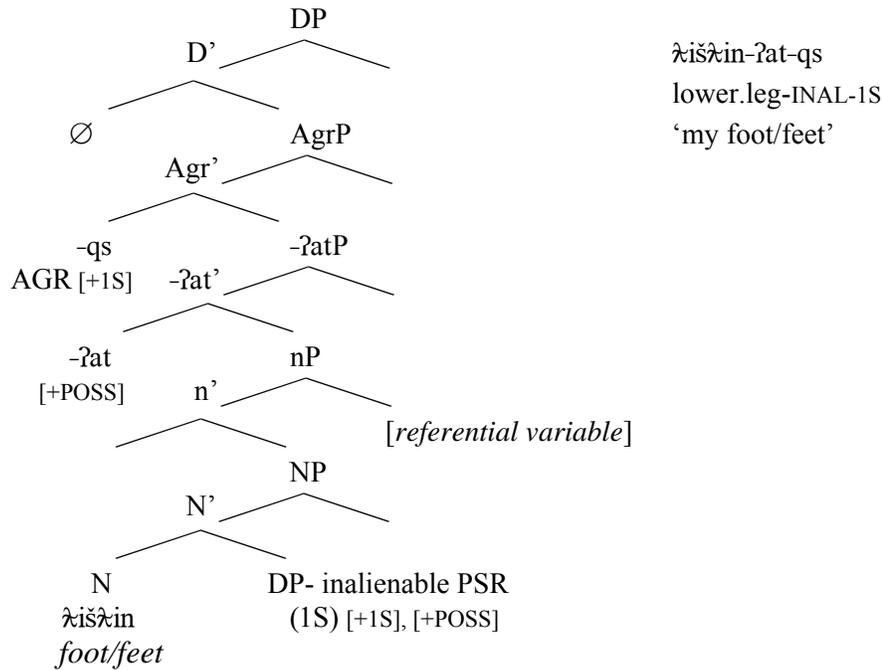
A passive analysis of inalienable possession

The largest difference between the passive and inalienable use of *–ʔat* is whether it refers to a transitive verb (passive reading) or a nominal (inalienable possessive reading).
    However, note that inalienably possessed nominals are parallel to transitive verbs in that both have a theta marked internal argument. In this sense, inalienably possessed nouns are "transitive nouns", whereby the noun must have a possessor as its complement. Therefore, if a function of *–ʔat* when combined with a transitive verb is to promote the internal argument (theme or patient) to an external (subject) position, this could also be the function of *-ʔat* with inalienable nominals. Recall the structure of an inalienably possessed DP, adapted here from section 3.4.

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[3] This is the end of a story about a man whose severed finger is surgically replaced with a toe.

(10)   *inalienably possessed DP*

```
                        DP
            D'_____/  _____
           /         \              x̌išx̌in-ʔat-qs
          ∅          AgrP           lower.leg-INAL-1S
                Agr'___/  \___      'my foot/feet'
               /      \
            -qs        -ʔatP
         AGR [+1S]  -ʔat'___/  \___
                   /       \
                -ʔat        nP
               [+POSS]    n'___/  \___
                         /     \    [referential variable]
                                NP
                         N'___/  \___
                        /     \
                       N       DP- inalienable PSR
                     x̌išx̌in    (1S) [+1S], [+POSS]
                    foot/feet
```

An alienable possessor is expected to be generated in an external position of the NP. If the presence of *-ʔat* promotes an inalienable "argument", the possessor, to a higher position from the complement of N position, it then should be expected to have the same syntactic behaviour as a higher, alienable, possessor. Such parallel behaviour is borne out in data throughout this thesis.

Problem: relational nouns

Where a possessive marker appears on a nominal predicate, either the predicate or the subject can be possessed.

   possessed nominal predicate:

(11)   ʔuuštaqyaksiš tiiča
        ʔuuštaqyu-ʔak -siš tiiča
        doctor   -POSS-1S teacher
        'The teacher is my doctor.'

(12)   ʔuušḥy̓umsukʔiš n̓uw̓iq waax̌wa
        ʔuušḥy̓ums-uk -ʔiš   n̓uw̓iq waax̌wa
        relative   -POSS-3IND Dad   Waatlwa
        'Waatlwa is Dad's friend/relative.' (Context: between siblings)

(13) ṅuẇiiqsaksiš
ṅuẇiiqsu-ʔak -siš
father -POSS-1S
'He is my father.'

possessed subject:

(14) musčumukʔiš ʔuuštaqyu Kay
musčum -uk -ʔiš ʔuuštaqyu Kay
commoner-POSS-3IND healer Kay
'Kay's doctor is a commoner.'

(15) quuɬukʷitwaʔiš Ken ʔuuštaqyu
quuɬ-uk -mit-waʔiš Ken ʔuuštaqyu
slave-POSS-PST-3QUOT Ken healer
'Ken's doctor was a slave.'

(16) ʔuuštaqyuẇitʼas uksiš tʼaṅa
ʔuuštaqyu-ẇitʼas -uk -siš tʼaṅa
healer -plan.to-POSS-1S.IND child
'My child will be a doctor.'

However, in sentences where either the nominal predicate or the subject is a relational noun, the relational noun must be interpreted as the possessed element.

(17) tiičaaksiš ʔumiiqsu
tiiča -ʔak -siš ʔumiiqsu
teacher-POSS-1S.IND mother
✓ **My** mother is a teacher
* 'The/My mother is **my** teacher.'

(18) ʔuuštaqyaksiš ẏukʷiiqsu
ʔuuštaqyu-ʔak -siš ẏukʷiiqsu
doctor -POSS-1S.IND y.sibling
✓ '**My** younger sibling is a doctor.'
* 'The younger sibling is **my** doctor.' (Context: looking at a picture of a family)

(19) ḥaẇiɬuksiš čakup yaqitii hiniiʔiƛ
ḥaẇiɬ-uk -siš čakup yaq -mit -ii hiniiʔiƛ
chief -POSS-1S.IND man REL-PST -3I.REL come.in
✓ 'My husband is (the) chief that came in.'
* 'The man who came in is my chief.'

From this I assume that relational nouns, like inalienable nouns, have an internal possessive relation that must be expressed. However, these relational nouns nonetheless behave in the same way as alienable nouns and combine with the alienable possessive

marker *-uk/-(ʔ)ak*, rather than *-ʔat*. If *-ʔat* is necessary to explain the parallel behaviour of inalienables with alienables in NCN due to the internal possessor argument associated with inalienably possessed nouns, then we are left unable to explain why relational nouns also behave like alienables, since they are not *-ʔat* marked. Therefore I provisionally assume that the two uses of *-ʔat* must be separate.