GRAMMATICAL POSSESSION IN NUU-CHAH-NULTH

by

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B.A., University of Massachusetts at Amherst, 2001

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS

in

THE FACULTY OF GRADUATE STUDIES
(Department of Linguistics)

THE UNIVERSITY OF BRITISH COLUMBIA

March, 2005

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The goal of this thesis is to provide a syntactic analysis of the 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 (\(\Phi\)) 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.
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Key to Glosses

( ) - contains optional elements
Ø - 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 - dubiative
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, -(?)ak, or -?at)
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’.

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 Sawdesh’s (1939) categorization.

Nuu-chah-nulth consonants:

<table>
<thead>
<tr>
<th></th>
<th>Labial</th>
<th>Dental</th>
<th>Alveolar</th>
<th>Lateral</th>
<th>Alveo-Palatal</th>
<th>Velar</th>
<th>Labialized Velar</th>
<th>Uvular</th>
<th>Labialized Uvular</th>
<th>Pharyngeal</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stops</strong></td>
<td>p</td>
<td>t</td>
<td>c</td>
<td>ʔ</td>
<td>č</td>
<td>k</td>
<td>kʷ</td>
<td>q</td>
<td>qʷ</td>
<td>ʔ</td>
<td>?</td>
</tr>
<tr>
<td><strong>Ejectives</strong></td>
<td>ŋ</td>
<td>ŋ</td>
<td>č</td>
<td>ʔ</td>
<td>č</td>
<td>k</td>
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<td>ŋ</td>
<td>ŋ</td>
<td>ʔ</td>
<td>?</td>
</tr>
<tr>
<td><strong>Fricatives</strong></td>
<td>s</td>
<td>ʃ</td>
<td>š</td>
<td>x</td>
<td>xʷ</td>
<td>x</td>
<td>xʷ</td>
<td>h</td>
<td>h</td>
<td></td>
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<tr>
<td><strong>Sonorants</strong></td>
<td>m</td>
<td>n</td>
<td>y</td>
<td>w</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Glottalized sonorants</strong></td>
<td>m</td>
<td>ŋ</td>
<td>ŋ</td>
<td>h</td>
<td>h</td>
<td></td>
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IPA equivalents:

<table>
<thead>
<tr>
<th>NCN:</th>
<th>IPA:</th>
</tr>
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<tbody>
<tr>
<td>c</td>
<td>[ts]</td>
</tr>
<tr>
<td>č</td>
<td>[ʃ]</td>
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<td>ʔ</td>
<td>[t]</td>
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<td>š</td>
<td>[ʃ]</td>
</tr>
<tr>
<td>x</td>
<td>[ɣ]</td>
</tr>
<tr>
<td>h</td>
<td>[h]</td>
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</table>
Nuu-chah-nulth vowels:

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>NCN</td>
<td>IPA</td>
<td>NCN</td>
</tr>
<tr>
<td>i, ii</td>
<td>[i],</td>
<td>[i:]</td>
<td>u,</td>
</tr>
<tr>
<td>Mid</td>
<td>e, ee</td>
<td>[ɛ],</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td>a, aa</td>
<td>[a],</td>
</tr>
</tbody>
</table>
ACKNOWLEDGEMENTS

First and foremost I am immensely grateful to my language consultants, without whom this type of work would be impossible. Their great patience, insight, and enthusiasm has been invaluable. I am especially grateful to Mary Jane Dick, who I worked with most often, for giving so much of her time and energy to language elicitation, and also for all the times she put up with my over-sleeping the start of an early morning meeting. Thank you to Katherine Fraser, my second main consultant, for always reminding me with such good humor that I am still just learning her language. Sarah Webster contributed great perspective on her language and answered questions tirelessly in very long meetings. I am also very thankful to Barbara Touchie, Archie and Josephine Thompson, and Barney Williams Jr. I will miss working with them and hearing their stories.

I feel incredibly lucky to have had the suggestions and encouragement of my thesis committee. I learned more about Linguistics under the supervision of Henry Davis than in the rest of my course-work combined. His help and dedication, sometimes at all hours of the night, consistently went above and beyond the call of duty, and I am very grateful. Felicia Lee and Lisa Matthewson always gave me sharp feedback and greatly improved my research. I particularly appreciate having received the benefit of my committee’s fieldwork experience.

Thanks to my fellow Wakashanist graduate students for all of their academic and emotional support: I could not have survived without Yunhee Chung and Olga Steriopolo. Rachel Wojdak and Florence Woo deserve special thanks for being unfailingly helpful, especially as my captive audience during long car rides and ferry trips during field elicitation. They always have interesting advice to give me and I feel like they’re my older sisters.

My project has improved from discussions with Kristin Johansdottir, Jeff Muehlbauer, Doug Pulleyblank, Martina Wiltschko, and all the students in Ling 518. Martina especially has an almost supernatural ability to tear one’s work completely apart at the same time as energizing one to do more. Everyone in the UBC Department of Linguistics has helped me greatly through all my time here. I must specially mention Edna Dharmaratne for always believing in me, even when I didn’t.

Fieldwork was funded by a Jacobs Research Fund grant, a UBC Hampton Fund Research Grant awarded to Henry Davis, SSHRC grant #410-2002-1715 awarded to Lisa Matthewson, SSHRC grant #410-2003-1138 awarded to Henry Davis, and SSHRC grant #410-2002-0041 awarded to Douglas Pulleyblank.

My extra-Linguistics “support crew”, Molly and Stacy, have helped me more than they know. Thanks very much to all my friends and family who always encouraged me, even though they didn’t always know quite what they were encouraging me to do.

Finally I am very grateful to Jesse, who rescued me from myself and my computer on a daily basis, and who managed to infect me with his sense of humor even at my lowest points.
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).

\(\text{Wakashan}^2\)

- **Northern**
  - Haisla-Henaksiala (Kitimat)
  - Heiltsuk (Bella Bella)
  - Kwak'ala (Kwakiutl)
  - Oowekyala (Oowekeeno)

- **Southern**
  - Ditidaht (Nitinaht)
  - Makah
  - Nuu-chah-nulth (Nootka)

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.

\(^1\) 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.

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 2004).

<table>
<thead>
<tr>
<th>Dialects</th>
<th>First nations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahousaht (Yaahuus?ath)</td>
<td>Ahousaht</td>
</tr>
<tr>
<td>Ehattesaht (Yihtis?ath)</td>
<td>Ehattesaht</td>
</tr>
<tr>
<td>Hesquiat (Hiik?u?ath)</td>
<td>Hesquiat</td>
</tr>
<tr>
<td>Kyuquot (Qaa?yu?kath)</td>
<td>Ka?yu:k'th/ Che:k'tles7et'h'</td>
</tr>
<tr>
<td>Mowachaht (Muwac?ath)</td>
<td>Mowachaht/ Muchalaht</td>
</tr>
<tr>
<td>Nuchatlaht (NucaF?ath)</td>
<td>Nuchatlaht</td>
</tr>
<tr>
<td>Ohiyaht (Hu?i?ath)</td>
<td>Hua-ay-aht</td>
</tr>
<tr>
<td>Tseshah (Citaa?ath)</td>
<td>Tseshah</td>
</tr>
<tr>
<td>Clayoquot (Ka?nuuk*w?i?ath)</td>
<td>Tla-o-quiath</td>
</tr>
<tr>
<td>Toquah (Tuk*aa?ath)</td>
<td>Toquah</td>
</tr>
<tr>
<td>Uchuklesaht (Huucuqkis?ath)</td>
<td>Uchucklesaht</td>
</tr>
<tr>
<td>Ucluelet (Yuua?u?i?ath)</td>
<td>Ucluelet</td>
</tr>
<tr>
<td>Hupacasath</td>
<td></td>
</tr>
<tr>
<td>Ditidaht</td>
<td></td>
</tr>
</tbody>
</table>

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 Hua-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/
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


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 Hwu-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. 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 (1975), although attention concerning Southern Wakashan languages was mainly directed at Ditidaht and Makah. 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 (2004) 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, which recently published a dictionary based on Sapir's documentation of the Tseshaht dialect (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 normal 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 secondary 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, 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 speak Nuu-chah-nulth daily at home or they use it in their place of work, but also they are all fluent in English. 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, including its sensitivity to a person/animacy hierarchy. 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) ?aciich tiica John
?aca-iic-h tiica John
Who-belong-3INT teacher John
Whose teacher is John? (Context: Of the listener’s three kids...)

(2) siyaasis ?ahnii ?aphspatu?at?i cixwatin
siya -aas -siis ?ahnii -as ?aphspatu -?at -?i cixwatin
me - belong-1S.IND DEIC-on.a.surface wing -INAL-3 eagle
That eagle’s wing belongs to me.

(3) ?unaaksis ?api capac
?unaak-sis?api capac
Ø- own-PERF-1S.IND canoe
I (now) own/have/possess a canoe.

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

(4) ʧičičçipʔis n̓ ʔuksʔi
 ʧičič -čip -ʔis n̓ ʔuksʔi
threw-BEN-3IND rock
He [Adam] threw his [Ken’s] rock. (speaker-volunteered sentence)

(5) wiwišʔaqʔukʔis tiiča ʔaʔa
 ʔiwišʔaq –uk –ʔis tiiča ʔaʔa
lazy -POSS -3.IND 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 2004). 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

<table>
<thead>
<tr>
<th>base</th>
<th>lexical suffixes</th>
<th>aspect suffix</th>
<th>clitics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>unextended word</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>extended word</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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).

11 Only “teacher” is overtly marked for possession. 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) ?aʔatuumitʔis [qʷicačičii Lucy]
    ?aʔatu -mitʔiiš [qʷi -ca -šič -ii Lucy]
    R -ask -PST -3IND [where -go-PERF-3l.REL Lucy ]
    She asked [where Lucy went]. (UBC Ling 431 database 2003)

(9) naatsičičitiši pišpiš [yaaqʷiʔʔatukʷitiis ᵇaćičʔat ʰiniíč]
    naatšiš -šič -mit -šič pišpiš [yaq -ʔuukʷiʔ -ʔat -uk -mit -iš ᵇaćič -ʔat ʰiniíč]
    see -PERF-PST -1SIND cat [REL do.to PASS POSS PST -IS.I.REL bite PASS dog]
    I saw the cat [which bit my dog]. (I saw the cat [which my dog was bitten by].)

(10) ḥacukʷiʔiš waʔič Ken
    ḥacuk -mitʔiš 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) \[
    \begin{array}{c}
    \text{XP} \\
    \text{Spec} \\
    \text{X} \\
    \text{Comp}
    \end{array}
\]

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.

---

\(^{12}\) In addition to this causative>>possessive ordering, Davidson also shows for the Tseseht dialect that where the possessive and causative morphemes co-occur, the possessive will precede the causative (2002:321-323). However, available Ahousaht data show no such alternation. I know of no other differences in clitic order between the two dialects at this time.
Adopting her configuration, I will assume the structure in (12) for a typical NCN clause.

(12)

```
C'       CP
   \-----\-----
       MoodP
  \------\------
     Mood-Agr
      \-----\-----
           TP
           \-----\-----
                 T'
           \------\------
                     v'

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 (1988) 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.
A linearization of this syntactic representation looks like this:

(15) input to PF: Mood + T + V ...

merger 1: Mood + [V - T] ...

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

✓ predicted order: tččiš - mit - ŋiš ....

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) hinin-ʔač-ʔiš John
hinin-ʔač-ʔiš John
arrive-TEMP-3.IND John
John 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 the final morpheme on a clausal head is a portmanteau Mood and Subject Agreement marker. 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 ḥaʔuk (to eat).

(19) Ahousaht14 indicative agreement paradigm:

|          | Singular          |                | Plural          |
|----------|-------------------|----------------|-----------------
| 1st      | ḥaʔuk-sis         | eat -1S.IND    | ḥaʔuk-nis       | eat -1PL.IND    |
|          | I am eating       |                | We are eating  |
| 2nd      | ḥaʔuk-itsk        | eat -2S.IND    | ḥaʔuk-icuuš     | eat -2PL.IND    |
|          | You-sg are eating |                | You-PL are eating |
| 3rd      | ḥaʔuk(-tis) Ken   | eat (-3IND) Ken| ḥaʔuk(-tis-(at)) Ken & Kay |
| 15       | Ken is eating     |                | Ken & 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 Mood/agreement paradigms are one of the most striking differences between dialects in NCN (see Appendix I).
15 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.
I assume that the subject is base-generated in Spec, vP (see 2.3.1 for discussion). I propose the MoodP has agreement (Φ) features, which the subject DP raises to check.

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

First sentence: Mood marker is obligatory

(22) a. **wikatwalezaʔa nanaq-ʔat ṭiiχkumc ħaa čakup-ʔi**
   That man doesn’t have a real thumb.

---

16 Other moods were not tested in this respect, but there is no reason to believe this effect differs from Kyuquot.
wik -?at ?aanaqh -?at ?iihkumc ḥaa ċakup-?i
NEG -PASS real -PASS thumb DEIC man -DET
That man doesn’t have a real thumb.

Within story: Mood marker no longer obligatory 17

?uhtin -?a? -?at ?iihkumc ćičiisaqhtum -?at -?i
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:

daacs?a?ksiicux
daacsa -?a? -ksiicux
see -TEMP -1S/2S.IND
I [Subj] see you [Obj]. (Davidson 2002:101)

(25) Ahousaht:

a. ńaatsaasiś
ńaatsii-a-siś
see -CONT -1S.IND
*I see you.

b. ńaatsaasiś suwa
ńaatsii-a-siś suwa
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. 18

Rose, as just one example, observes VSO, VOS, SVO, OVS, VS and VO orderings in a set of non-elicited (conversation or monologue) sentences (1981: 179-180).

17 This is the end of a description of a man whose severed finger has been surgically replaced with one of his toes.
18 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).
NCN 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,” 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. However, 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 elements are generated in for structure (12) (2.3.1).19

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, 2004b, Stonham 2005). Subjects cannot be incorporated (26b). In the absence of incorporation, these predicates attach to the morpheme $\mathcal{A}$- (26c).

(26) a. ma$\mathcal{H}$ti-$\mathcal{A}$amit$\mathcal{R}$is $\mathcal{C}$akup
    ma$\mathcal{H}$ti-$\mathcal{A}$ap-mit-$\mathcal{R}$is $\mathcal{C}$akup
    house-buy-PST-3.IND man
    A man bought a house
    (adapted from Wojdak 2004)

b. * $\mathcal{C}$akup$\mathcal{A}$amit$\mathcal{R}$is ma$\mathcal{H}$ti
    $\mathcal{C}$akup-$\mathcal{A}$ap-mit-$\mathcal{R}$is ma$\mathcal{H}$ti
    man-buy-PST-3.IND house
    A man bought a house
    (adapted from Wojdak 2004)

c. $\mathcal{A}$ma$\mathcal{R}$amit$\mathcal{R}$is $\mathcal{C}$akup ma$\mathcal{H}$ti
    $\mathcal{A}$-qa$\mathcal{R}$ap-mit-$\mathcal{R}$is $\mathcal{C}$akup ma$\mathcal{H}$ti
    $\mathcal{R}$-buy-PST-3.IND man house
    A man bought a house.
    (adapted from Wojdak 2004)

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, 2004b, in prep) for detailed discussion.

19 This contrasts with alternative VSO-order accounts such as Davis and Sawai (2001) or Lee (2000), among others.
20 Davis and Sawai (2001) note one exception, in that the auxiliary -aq can incorporate a subject.
2.3.5 Passive

Since one allomorph of the possessive morpheme -uk/-?ak/-?at is formally identical to the passive morpheme -?at, and since the process of possessor raising interacts with passivization, a brief discussion of the “passive” morpheme is in order \(^{21}\). The exact nature of -?at 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 -?at 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 -?at 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, section 2.3.6) in determining the presence or absence of -?at is a well-known property of inverse systems. Emanatian suggests that the animacy hierarchy may be a separate requirement within the language, and not inherently analyzable as part of the -?at construction. She cites evidence from Bantu languages, Coast Salish languages, and English to support this hypothesis (1988:282). Woo (in prep) reinforces this claim by showing evidence of animacy hierarchy effects in unrelated NCN constructions. Finally, Kim (2000) offers a syntactic analysis that accounts for the -?at construction as a full passive, whereby the animacy hierarchy effects are epiphenomenal to a proposed 3rd person feature associated with -?at.

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, Woo in prep).

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 -?at (glossed passive herein). Despite the truth-conditional equivalence of

---

\(^{21}\) Section 3.1.2 illustrates -?at in its separate role as an inalienable possession marker.
-?at marked (passive) and active forms, the use of one or the other in a given context is determined by the following constraints:

(27) **Person constraints on presence of -?at** (Whistler 1985, Kim 2000)

<table>
<thead>
<tr>
<th>Agent/effector</th>
<th>Theme/patient</th>
<th>status of -?at</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1/2</td>
<td>-?at is obligatory</td>
</tr>
<tr>
<td>1/2</td>
<td>1/2/3</td>
<td>-?at is prohibited</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>-?at is optional</td>
</tr>
</tbody>
</table>

Rose and Carlson (1984) offer counter-examples to the chart above, in that -?at 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) naatsiicifitsis mahtii-mit?i
    naatsii-siš -mit -siš mahtii-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) ?ututut?itsis naniqakitsqs
    ?u-tu-tur-mit-siš naniqsu -?ak -mit-ts
R-Ø-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).

    kuuku?wisa-?i  ?unah-<ck>-?ís-?í kuuku?wisa
    hair.seal-DET size-DIM-DIM-DET hair.seal
    the hair seal the small hair seal

(Nakayama 2001:78)
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.

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).
2.4.2 The determiner -ʔ

The properties and distribution of the clitic -ʔ in NCN are not fully understood. Sapir (1924), Swadesh (1948), and Rose (1981) refer to it as some form of definite marker. However, available data seems to indicate that the morpheme -ʔ does not consistently indicate definiteness. It is often optional, and is prohibited from appearing on more than one argument of a clause simultaneously.

(34) a. ʔuʔicʔiš maamaati pišpiš
ʔu -ʔic -ʔiš maamaati pišpiš
Ø -consume -3IND bird cat
The bird is eating the cat.

b. ʔuʔicʔiš maamaatiʔi pišpiš
ʔu -ʔic -ʔiš maamaati-ʔi pišpiš
Ø -consume -3IND bird DET cat
The bird is eating the cat.

c. ʔuʔicʔiš maamaati pišpišʔi
ʔu -ʔic -ʔiš maamaati pišpiš-ʔi
Ø -consume -3IND bird cat DET
The cat is eating the bird.

c. * ʔuʔicʔiš maamaatiʔi pišpišʔi

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

(35) a. √ hávri-ʔiš John
chief -3IND John
John is a chief.

b. * hávri-ʔi-ʔiš John
chief -DET-3IND John
*John is the chief.

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

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

b. * tiiča-siš-ʔi
teacher-1S.IND-DET
*I am the teacher
In addition, Davidson points out that the distribution of -?i is subject to topicality or communicative importance, concluding that “Further study of how [-?i] is used in discourse is the only sure way of making progress on these questions.” (2002:299).

As Davidson further points out, the morpheme -?i 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.

Nonetheless, NCN does demonstrate wide flexibility between predicative and argumental use of open-class roots (that is, nouns, verbs, adjectives, and adverbs).

(37) verbal predicate, nominal argument:

\[ \text{mamuuk-?i} \quad \text{cakup-?i} \]
\[ \text{work} \quad -3.IND \quad \text{man}-\text{DET} \]

The man is working. (Wojdak 2001:1)

(38) adjectival predicate, verbal argument:

\[ \text{hiix*} \quad \text{athii-} \quad \text{mamuuk-?i} \]
\[ \text{cranky-3.IND} \quad \text{work} \quad -\text{DET} \]

The working (one) is cranky. (Wojdak 2001:1)

(39) nominal predicate, adjectival argument:

\[ \text{cakup-?i} \quad \text{hiix*} \quad \text{athii-?i} \]
\[ \text{man} \quad -3.IND \quad \text{cranky} \quad -\text{DET} \]

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

Nominal predicate structure differs from verbal predicate structure in that there is no VP present. In example (44) "ḥawiʔ-ʔiš John," (John is a chief) below, the N ḥawiʔ, "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 the underlying subject position in the case of a predicate nominal is in Spec, nP.

2.7 Independent pronouns

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

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>siya</td>
<td>niiwa</td>
</tr>
<tr>
<td>2</td>
<td>suwa</td>
<td>siiswa</td>
</tr>
</tbody>
</table>

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

(46) wiŋaŋaŋkstumit?ick siya
    wik -?aŋk -stup -mit -?ick siya
    NEG -inside -thing -PST -2S.IND 1S
    You made me unhappy.

(47) qaaciimitsiš suwa tuhciti
    qaaci -mit -siš suwa tuhciti
    give -PST -1S.IND you head(s)
    I gave (to).you (fish) heads.

(48) a. tiiča?iš John
    tiiča?iš John
    teacher-3.IND John
    John is a teacher

b. tiičasiš siya
    tiiča -siš siya
    teacher-1S.IND 1S
    Me, I’m a teacher.

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

(49) a. ?uuc?iš čapac John
    ?u-iic -?iš čapac John
    Ø-belong -3IND canoe John
    The canoe belongs to John.

b. * ?uuc?iš čapac siya
    ?u -iic -?iš čapac siya
    Ø -belong -3IND canoe 1S

Most often these independent pronouns appear incorporated into a predicate.

(50) siyaʔaŋaŋkaŋčas waʔaak
    siya -ŋaŋčas waʔaak
    1S -TEMP -1S.QUOT to.go
    It’s me that has to go.

The predicate qaac means “give” in the sense of giving food. For instance a sweater (as a gift) would use nāhi. The two represent different senses of “give” and are mutually exclusive:

* nāhi-mit-siš suwa tuhciti
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. 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 related issues such as the nature and distribution of the morphemes -ʔat and -ʔ, noun incorporation, and overt pronouns. Despite great flexibility between categories, I assume that nouns and verbs are primitives in NCN.
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 in 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, and I propose a structure to account for them as well.

3.1 The possessive clitic: (in)alienable distinction

In Nuu-chah-nulth possessive DPs the clitic -uk/-(?)ak, denoting alienable possession (52a-b), or -?at, 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
    shoe(s)-POSS-1S
    “my shoes”

   b. sapnii-?ak-qs
    bread -POSS-1S
    “my bread”

(53) a. ṭinaqstatqs
    thoughts-INAL-1S
    “my thoughts/mind”

   b. ničaatqs
    nose-INAL-1S
    “my nose”

Rose notes for the Kyuquot dialect that when possession of a body part is indicated, “-?at can always be replaced by -uk” (1981:234). Davidson observes from Tseshaht texts that -?at can “optionally replace the possessive clitic” -uk/-(?)ak to show inalienable possession (2002:314). Both Rose and Davidson illustrate this using a single one-word example and provide no context. While it is true that examples of body parts marked by -uk/-(?)ak do appear in Tseshaht data (Sapir and Swadesh 1939), there is some evidence that alienable marking -uk/-(?)ak does not alternate freely with inalienable -?at without a supporting context. Braithwaite (2002:9) contrasts examples of “his head” from Tseshaht texts, marked with -uk/-(?)ak in one case and -?at in the other. In the case marked with -(?)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. čiɾatamitwaʔiš Vincent ḫapiʔatʔi
    či - ḫatap - mit -waʔiš Vincent ḫapiił ḫat -ʔi
    cut-away.from-PST -3QUOT Vincent ear- INAL-3
    Vincent [van Gogh] cut his (own) ear off.
b. * č’atamitwaʔis Vincent papiʔakʔi
cut-away.from-PST -3QUOT Vincent ear- POSS-3

(55) č’atapatukʔis papiʔatʔi 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: “č’atapaʔatukʔis papiʔakʔi...”
KF: (interrupting): “No, ʔat.”
CR: “papiʔakʔi...”
KF: (interrupting): “ʔat.”
CR: “You can’t say papiʔakʔi?”
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/-ak is used to mark alienable possession in NCN, together with an agreement clitic matching the person and number of the possessor. The -uk allomorph follows consonants (57a) while -ak follows vowels (57b). Henceforth I will refer to either version of this morpheme simply as the possessive morpheme (POSS).

(57) a. ?uushyumsukʔi Sam
friend -POSS-3 Sam
“Sam’s friend”

b. tiičaakʔi 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
-uk/-ak. However, these morphemes are distinct, showing different morphological and phonological patterns. Specifically, the two morphemes (i) have different patterns of allomorphy and (ii) fall into different morphological clitic-ordering slots.

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

(58) -uk follows consonants:

a. šuwis-uk-qs - My shoe(s)  b. čapac-uk-ʔi  John - John’s canoe
cshoe(s)-POSS-1s  canoe-POSS-3 John

(59) -ʔak follows vowels:

a. sapnii-ʔak-qs - my bread  b. mahti-ʔak-ʔi  Rachel - Rachel’s house
bbread -POSS-1s  house-POSS-3 Rachel

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

(60) ʔuwiiqs - ak-ʔi  - his father
ʔuwiiqsu -ʔak-ʔi  father- POSS-3s

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

Both -(ʔ)uk and -(ʔ)ak following consonants:

(61) a. wiiʔas-uk-ʔiš -S/He is quiet  b. ʔucq-ak  -foggy
quiet-DUR-3IND  fog-DUR
c. ʔiʔ-uk  -red  -red  d. qaʔ-ak  -dead
red-DUR  die-DUR

Both -(ʔ)uk and -(ʔ)ak following vowels:

(62) a. kwaa-ʔuk  -to move backwards  b. wiʔak  -stubborn
back-DUR  stubborn-DUR
c. haʔuk  -to eat  d. yaʔak  -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.
The durative and the possessive morphemes can both appear attached to a predicate. Where these morphemes co-occur it is clear that they fall into different morphological slots (2.2) since 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).

Further evidence for the categorization of -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 status of the possessive morphology (section 2.3).

This evidence shows that the phonological resemblance between the durative and possessive 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 lists for Kyuquot legal or social ownership, social relationships, and “physical adjacency or association” (1981: 235). 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. ʔuyuʔaaʔiš hupkum̥̊ʔišiniʔukqs
ʔu-yuʔaa-ʔiš hupkum̥̊ʔišiniʔ-uk-qs
Ø-find -3IND ball dog-POSS-1S
My dog found a ball.  
(R. Wojdak, p.c.)

b. ʔihqaqukʔišiʔî̑c̕um̥̊ʔ Florence
ʔiʔ-aqaq-uk -ʔȋ iʔî̑c̕um̥̊ʔ Florence
big-very -POSS-3 (straw) hat Florence
Florence's big hat

(69) a. hawiʔukʔis ʔaaʔuusʔat̕h
hawiʔ-uk -ʔiš ʔaaʔuusʔat̕h
chief-POSS-3 IND Ahousaht
He is the Ahousaht's chief

b. ʔukʷiiqsakn̕is Ken
ʔukʷiiqs -ak -niš Ken
younger.sibling-POSS-1PL.IND Ken
Ken is our brother

(70) ʔuukʷiiči ɪ̱̱myiʔ ʃuʔu̱t̕uk̕i Ɂ̑aakupiʔ
ʔu-u̱kʷiiči ɪ̱̱myiʔ ʃuʔu̱t̕uk̕i -ʔi Ɂ̑aakup-iih
Ø-do.to-2S.IMP wash-ʔ-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) witqukʔis ʔaap̕ a
witq-uk -ʔiš ʔaap̕ a
ugly-POSS-3IND canoe
Her/His canoe [that s/he made] is poor work.
Context: a model-canoe building contest

(72) yaaqʔiš ʔawanu̱šukʔit̕k
yaaq-ʔiš ʔawanu̱š-uk-ʔit̕k
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 -\(\ddot{a}t\) 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 2.2.5), but an analysis of its function as an inalienable possessive marker has been largely left aside. A passive analysis of -\(\ddot{a}t\) 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 -\(u\kappa/-\dot{a}k\).

(See Appendix II for further discussion.) I will therefore assume for the purposes of this thesis that passive -\(\ddot{a}t\) and inalienable -\(\ddot{a}t\) 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 -\(\ddot{a}t\) represents a possessive relation to body parts\(^23\) (Rose 1981, Davidson 2002) as well as to ideas, thoughts, and sometimes dreams or hopes.

(73) a nica - “nose” b. nicaatqs - “my nose”

(74) hi\(\ddot{a}\)as\(\ddot{a}\)s Olga qacaas\(\ddot{a}\)tqs
hi\(\ddot{a}\) - as -\(\ddot{a}\)s Olga qa - caas -\(\ddot{a}\)t-qs
LOC-on.surface-3IND Olga left-side - INAL-1S
Olga is sitting to my left side. (O. Steriopolo, p.c.)

(75) \(\ddot{a}\)u-ya-\(\ddot{a}\)i-\(\ddot{a}\)s ti\(\ddot{a}\)aqstatqin
\(\ddot{a}\)u\(\ddot{a}\) - ya -\(\ddot{a}\)i -\(\ddot{a}\)s ti\(\ddot{a}\)aqsti -\(\ddot{a}\)at -qin
good-CONT-PERF-3IND thoughts/mind-INAL-1PL
We are happy, we are feeling good. (Lit.- Our thoughts are [now] good.)

\(^{23}\)Body parts are often expressed as lexical suffixes (2.2) attached to the predicate. In this alternate form they do not take any additional suffixation, which is expected as they are not independent arguments, but predicate modifiers.

i. \(\ddot{a}\)ma\(\ddot{a}\)aqa\(\ddot{a}\)hi\(\ddot{a}\)ant\(\ddot{a}\)s Mary \(\ddot{a}\)nii\(\ddot{a}\)i
\(\ddot{a}\)ma-\(\ddot{a}\) - qa\(\ddot{a}\)hi -\(\ddot{a}\)at -mit -\(\ddot{a}\)s Mary \(\ddot{a}\)nii\(\ddot{a}\)i -\(\ddot{a}\)
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. 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 possessive 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**

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>siyaas</td>
</tr>
<tr>
<td>2</td>
<td>suwaas</td>
</tr>
</tbody>
</table>

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

(77) Q: ?ačič ?ahkuu ʔiniik(ʔi)

who-own -3INT this-nearby dog (-DET)

To whom does that dog belong?

A: siyaas

siya-aas

1S -belong

It belongs to me.

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

(78) suwaasiciʔačič hupkuumʔukqs

suwa -aas -iic -ʔač -ʔick hupkuumʔ-uk -qs

you -belong-INCEP-TEMP-2S.IND ball -POSS-1S

My ball is yours now. (My toy ball belongs to you now.)

(79) siyaasiš čapac

siya-aas -siš čapac

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) ?uushyums?ick siyaaas
?uushyums-?ick siyaa-aas
relative -2S.IND 1S.-belong
You are my friend/relative

(81) ?ukiiqsu?is niwaas
?ukiiqsu -?is niwa-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) wikatuk?its kuwu?it(?)at siyaas?i c?apac
wik -?at -uk -mit -si? kuwu?it (-?at) siya-aas -?i c?apac
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) ?ukiiqsa?akuku?h?uk siyaas?i kuunaa ?atquk...
?u -?i-?a?c -?a?c -uk -(w)uus-h -suk siyaas -?i
so.and.so-at-in.a.vessel-TEMP-POSS-DUB -SUBOR-2S 1S.POSS-3
kuunaa ?atq -uk ...
schooner goods-DUR

“Your goods would be carried in my schooner, ...”
(Davidson 2002:341)24

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. mahtii b. mahtii-?ak-?i Rachel c. cu?uk-uk-?i mahtii 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.

see -PERF-PST-1S.IND father -POSS-3 friend -POSS-3 Sam
I saw Sam’s friend/relative’s25 father. (*I saw Sam’s father’s relative.)

24 Originally cited from Sapir and Swadesh (1939:144.34-35).
25 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. ŋaaṭsi’ii-čít-siš ŋuushyumsuk’i ŋuwi’iqsak’i Sam
 ŋaaṭsi-šiš -mit-siš ŋuushyums-uk -ʔi ŋuwi’iqs-ak -ʔi Sam
 see -PERF-PST-1S.IND friend -POSS-3 father -POSS-3 Sam
I saw Sam’s father’s friend/relative. (*I saw Sam’s relative’s father.)

(86) a. haʔukʔiš ŋuushyumsuk’i Sam
 haʔuk-ʔiš ŋuushyums-uk -ʔi Sam
 eat -3IND friend -POSS-3 Sam
Sam’s friend is eating.

b. haʔukʔiš Sam ŋuushyumsuk’i
 haʔuk -ʔiš ŋuushyums-uk -ʔi Sam
 eat -3IND Sam relative -POSS-3
“Sam’s eating his relative.” Consultant: Sam is a cannibal?
unavailable: * “Sam’s friend/relative is eating.”

(87) a. čaapacmaʔuk’iš tiičaak’i John
 čaapac-ма’uk -ʔiš tiiča -ʔak -ʔi John
 canoe-maker.of-3IND teacher-POSS-3 John
John’s teacher is a canoe-maker.

b. čaapacmaʔuk’iš John tiičaak’i
 John’s teacher is a canoe-maker.

(88) a. nunuukqathʔiš Rachel ŋuustaqtyak’i
 nu-nuuk-qath-ʔiš Rachel ŋuustaqtyu-ʔak -ʔi
 R-sing -claim-3IND Rachel healer -POSS-3
Rachel’s doctor is pretending to sing.

b. nunuukqathʔiš ŋuustaqtyak’i Rachel
Rachel’s doctor is pretending to sing.

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

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.

31
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. ʔukʰiːmahšaʔiš ʔiːča-ak-ʔi Florence ʔiːpáč  
ʔukʰiːmahšaʔiš ʔiːča-ak-ʔi Florence ʔiːpáč  
make -want -3IND teacher-POSS-3 Florence canoe  
Florence’s teacher wants to make a canoe.

b. ʔukʰiːmahšaʔiš Florence ʔiːčaakʔi ʔiːpáč  
Florence ʔiːčaakʔi ʔiːpáč  
Florence’s teacher wants to make a canoe.

c. * ʔukʰiːmahšaʔiš ʔiːčaakʔi 罅’apac Florence  
ʔukʰiːmahšaʔiš Florence ʔiːča-ak-ʔi Florence  
make -want -3IND Florence canoe teacher-POSS-3  
Consultant:  
“This sounds like, “The canoe’s teacher wants to make... hmm.”

d. * ʔukʰiːmahšaʔiš Florence ʔiːčaakʔi  
ʔukʰiːmahšaʔiš Florence ʔiːčaakʔi  
Florence’s teacher wants to make a canoe.  

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

```
(possessive DP)  
      DP  
     /   
   (DET)   PossP  
  /   
(possessor)    nP  
 |   |   [referential variable]  
|   |   NP  
|   |   (DP- alienable PSR)  
|   |   N-PSM  
```

[+POSS]  

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

27 Note that a non-constituent reading is perfectly grammatical for this form, however:
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.

\((91)\)

```
\[
\begin{array}{c}
\text{N-PSM} \\
\text{N} \quad \text{NP} \\
\text{n} \\
\text{[referential variable]} \\
\text{N'} \\
\text{NP} \\
\text{Poss'} \\
\text{PossP} \\
\text{(POSS)} \\
\text{DP} \\
\text{D'} \\
\end{array}
\]
```

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)\(^\text{28}\). However, the possessive paradigm cannot be reduced to its original components in contemporary Ahousaht NCN.

\(^\text{28}\) 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. 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) țičićiťiš Adam mūkstiʔakqś
tićić -mit-țiš Adam mūksti-ʔak -qś
throw-PST-3IND Adam rock - POSS-1S
Adam threw my rock.

(93) țičićiťiš Adam mūkstiʔakʔitqsuu
tica-͈mit-țiš Adam műkst'iʔak-ʔitqsuu
throw-PST-3S.IND Adam rock-POSS-2PL
Adam threw your-PL rock.

(94) țičićiťiš Adam mūkstiʔak’i(ʔa+))
tićić- mit-țiš Adam műkst'i-ʔak-(ʔa+)n)
throw-PST-3S.IND Adam rock - POSS- 3.PL
Adam threw their rock.

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):

---

Interestingly, Davidson also reports there is 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.” (2002:299-300). In his 2 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 =a used only with kin terms...” This paradigm is included below.

<table>
<thead>
<tr>
<th></th>
<th>Sg</th>
<th>Pl</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>=siś</td>
<td>=dis</td>
</tr>
<tr>
<td>2nd</td>
<td>=sic</td>
<td>=sása / =sică</td>
</tr>
<tr>
<td>3rd</td>
<td>=’uuc</td>
<td>=’uća+</td>
</tr>
</tbody>
</table>
(95) ḥawiʔuksiš John
    ḥawiʔ-uk -siš John
 chief-POSS-1S.IND John
 "John is my chief."

(96) ḷuk*iiqsakniš Ken
    ḷuk*iiqšu-ʔak -niš Ken
 brother -POSS-1PL.IND Ken
 "Ken is our brother."

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

(97) *ʔuʔuk*inkingiš ῥupuhukqs ῥupuhukʔítk
    ῥuʔuk*ink -mit-ʔiš ῥupuh-uk -qs ῥupuh-uk -ʔítk
 ∅ -talk.with-PST-3IND ῥupuh -POSS -1S ῥupuh -POSS -2S
 My ῥupuh was talking to your ῥupuh. 30

3.4.1.1 Third person agreement versus the determiner -ʔí

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) wiwiik'caqmapriš John...
    wi-wiik-čaqmāp-riš John...
 R -NEG-to.mind-3IND John...
 "John isn’t minding..."

a. ✓...nuwiq̱s-ak- -“his father” b. ✓...nuwiq̱s-ak-ʔí -“his father”
    father-POSS father-POSS-3

c. ✓...hawiʔ-uk- -“his chief” d. ✓...hawiʔ-uk-ʔí -“his chief”
    chief-POSS chief-POSS-3

(99) a. činʔkichiriš ḷuk*iiqsakʔí
    činʔk -mit -ʔiš ḷuk*iiqšu-ʔak-ʔí
 pull.hair-PST-3IND y.sibling-POSS-3
 He/She pulled his/her younger sibling’s hair.

b. činʔkichiriš ḷuk*iiqsak
    činʔk -mit -ʔiš ḷuk*iiqšu-ʔak
 pull.hair-PST-3IND y.sibling-POSS
 He/She pulled his/her younger sibling’s hair.

30 In a context where the mothers of two (unrelated) girls, both called ῥupuh, are talking about the girls.
By contrast, where the PSR is first or second person the agreement morphemes following POSS are always obligatory.

(100) a.  
\[
\text{maci} \text{cî} \text{xit} \text{î} \text{î} \text{s } k^* \text{aa} \text{uucuk} \text{q} \text{s } \text{uu} \text{u} \text{sta} \text{qyuu} \text{r} \text{i} \\
\text{maci} \text{cî} \text{c} \text{x} \text{mit} \text{t} \text{î} \text{s } k^* \text{aa} \text{uuc} \text{c} \text{t} \text{uk } \text{q} \text{s } \text{uu} \text{u} \text{sta} \text{qyuu} \text{r} \text{i} \\
\text{bite } \text{PST} \text{-3} \text{IND grandchild-POSS-1S doctor -3} \\
\text{My grandchild bit the doctor.}
\]

b. *  
\[
\text{maci} \text{cî} \text{xit} \text{î} \text{î} \text{s } k^* \text{aa} \text{uucuk } \text{q} \text{s } \text{uu} \text{u} \text{sta} \text{qyuu} \text{r} \text{i} \\
\text{maci} \text{cî} \text{c} \text{x} \text{mit} \text{t} \text{i} \text{s } k^* \text{aa} \text{uuc } \text{uk } \text{q} \text{s } \text{uu} \text{u} \text{sta} \text{qyuu} \text{r} \text{i} \\
\text{bite } \text{PST} \text{-3} \text{IND grandchild-POSS doctor -3} \\
* \text{My grandchild bit the doctor. (✓“His/Her GC bit the Dr”)}
\]

(101) a.  
\[
\text{uuta} \text{a} \text{fak} \text{n} \text{i} \text{s } \text{c} \text{apacukqin} \\
\text{uutaq} \text{-?ak } \text{mit } \text{n} \text{i} \text{s } \text{c} \text{apac } \text{uk } \text{qin} \\
\text{fix } \text{-TEMP } \text{PST-1PL.IND canoe-POSS-1PL} \\
\text{We fixed our canoe./ canoe-race context: We got our canoe ready.}
\]

b. *  
\[
\text{uuta} \text{a} \text{fak} \text{n} \text{i} \text{s } \text{c} \text{apacuk } \\
\text{uuta} \text{a} \text{fak } \text{mit } \text{n} \text{i} \text{s } \text{c} \text{apac-uk } \\
\text{fix } \text{PST-1PL.IND canoe-POSS} \\
* \text{We fixed our canoe.} \\
* \text{We fixed his canoe.}
\]

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

(i) [-?i] consists of null third person agreement plus a determiner
(ii) [-?i] consists of an overt third person agreement plus a null determiner
(iii) [-?i] 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 2.2.2), which becomes obligatory in ambiguous contexts. This predicts that if the third person possessive agreement is null, removal of -?I (presumably the determiner) in an ambiguous possessive context should be grammatical. This is not the case.

(102) a.  
\[
\text{k}^* \text{a} \text{yuucap} \text{c} \text{p?i} \text{s } \text{ux}^* \text{aapak(?)} \\
\text{k}^* \text{a } \text{-yuuc-} \text{c} \text{p -?i} \text{s } \text{ux}^* \text{aap-ak -(?i)} \\
\text{break-CAUS-BEN-3IND paddle } \text{-POSS-3} \\
\text{He broke his paddle.}
\]
b. \( k^w ay\!a ap\!c bi ni \?u x^* aap\!a k \) \\
\( k^w a \ -ya ap \ -\!c i p \ -n i \!s \ \?u x^* aap\!a k \ -\!i \) \\
break-CAUS-BEN-1PL.IND paddle -POSS-3 \\
We broke his paddle.

c. * \( k^w ay\!a ap\!c bi ni \?u x^* aap \) \\
\( k^w a \ -ya ap \ -\!c i p \ -n i \!s \ \?u x^* aap\!a k \) \\
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 -\( \!i \) following POSS is optional. However, in (102b-c), where an appropriate local antecedent is absent (subject agreement is first person), -\( \!i \) is obligatory. If -\( \!i \) were the 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) * \( \?u \!i ic \!i \!i \!i \ maamaat\!i \!i \!i piisp\!i \!i \) \\
\( \?u \ -\!i ic \ -\!i \!i \ maamaat\!i \!i piisp\!i \!i \) \\
\( \emptyset \ -\text{consume} \ -3IND \ bird \ \!i cat \ -\text{DET} \) \\
The cat is eating the bird. (repeated from 34c)

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 -\( \!i \) following POSS and the -\( \!i \) independent of POSS are two different morphemes.

(104) witqi\!is huupuk\!s asuk\!i \?u\!u\!s\!ta\!q\!y\!u\!i \!i \\
witqi \ -\!i \!i huupuk\!s as-\!uk \ -\!i \?u\!u\!s\!ta\!q\!y\!u\!i \!i \\
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) caask\!a\!i\!i\!i\!i \!i ni\!i\!i\!u\!k\!i \Doug piisp\!i\!i\!u\!k\!i \\
caask\!a\!i\!i\!i\!i \ -\!i \!i ni\!i\!i\!x\!-\!uk \ -\!i \ Doug piisp\!i\!i\!x\!-\!uk \ -\!i \\
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 -\( \!i \) 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 -\( \!i \) must consist of a null determiner plus overt third person possessive agreement, and there is no evidence that any instances of -\( \!i \) 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. 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)

\[
\begin{array}{c}
\text{mahtii-} \hat{\text{a}}k \text{-i Rachel} \\
\text{mahtii-} \hat{\text{a}}k -\text{i Rachel} \\
\text{house-POSS-3 Rachel} \\
\text{Rachel’s house}
\end{array}
\]

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)\(^\text{31}\) for justification of this analysis in the clausal domain). 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:

\begin{align*}
\text{(107) input to PF: } & \text{Agr + POSS + PSM ...} \\
\text{merger 1: } & \text{Agr + [PSM - POSS] ...} \\
\text{merger 2: } & [[\text{PSM - POSS}] - \text{Agr}] ... \\
\text{predicted order: } & \text{mahtii -} \hat{\text{a}}k -\text{i ...}
\end{align*}

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

\(^{31}\) 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. This is demonstrated in (108)-(111).

(108) hiqaawaʔiš Ken huupukʷasukʷitʔi
wreck-CONT-3QUOT Ken car -POSS-PST-3
Ken wrecked his car (and destroyed it).

(109) ŋaatsiičikitsiš huupukʷasukʷitʔitk
see -PERF-PST-1S.IND car -POSS-PST-2S
I saw your former car.33

(110) ʔiniitqunikʷitqs
dog -POSS-PST-1S
my old (former) dog

(111) tiičaʔak-it-qs
teacher-POSS-PST-1S
My deceased teacher (*former teacher)

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

---

33 Attached to a DP, past tense indicates death, destruction or loss. See Burton 1996, among others, for more discussion of past tense on nouns.

33 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

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, yielding 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 the left-most element of the phrase. This is illustrated where adjectives appear to the left of the PSM they modify (114) – (115).

(114) a. ńaatsiičįįkvtwačiš Christine mahčįį

b. ńaatsiičįįkvtwačiš Christine mahčįįʔak-ʔi Rachel
c. ųnaatsiičitwaʔiš Christine čušukukʔi mahtii Rachel 
ʔaatsiiš -mit-waʔiš Christine čušuk-uk -ʔi mahtii Rachel 
see- -PERF-PST-3QUOT Christine new -POSS-3 house Rachel 
Christine saw Rachel's new house.

(115) a. ʔuʔusumʔiš Christine ʔihaqaq xešum+ xešičum+ 
ʔuʔusumʔiš Christine ʔiʔaqaq xešum+ xešičum+ 
Ø - want- 3IND Christine big-very red hat 
Christine wants a big red hat.

b. ʔuʔusumʔiš Christine ʔiʔaqaq-uk-ʔi xešum+ xešičum+ Florence 
ʔuʔusumʔiš Christine ʔiʔaqaq-uk-ʔi xešum+ xešičum+ Florence 
Ø - want- 3IND Christine big-very-POSS-3 red hat 
Christine wants Florence's big red hat.

The structure below represents modification of a possessum:

\[
\begin{array}{c}
\text{DP} \\
\text{Ø} \\
\text{AgrP} \\
\text{–ʔi} \\
\text{(TP)} \\
\text{3 [+3]} \\
\text{T’} \\
\text{PossP} \\
\text{-uk} \\
\text{POSS [+POSS]} \\
\text{AdjP} \\
\text{čušuk} \\
\text{new} \\
\text{Rachel} \\
\text{[+3], [+POSS]} \\
\end{array}
\]

\[
\begin{array}{c}
\text{čušukukʔi mahtii Rachel} \\
\text{čušuk-uk -ʔi mahtii Rachel} \\
\text{new -POSS-3 house Rachel} \\
\text{Rachel's new house} \\
\end{array}
\]

In this configuration, the AP headed by the adjective čušuk (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\(^\text{34}\), in that unmarked Adjective-PSM PSR word order can not be generated (without multiple derivations) in a

\(^{34}\) I am grateful to R. Wojdak for this suggestion.
configuration with left-branching specifiers. This is because the possessor DP intervenes 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) tiičāwīt’asukʔick ṭuucmaʔi
  tiiča -wīt’as -uk -tick ṭuucmaʔi
  teacher-planning.to-POSS-2S.IND woman-DET
  That woman is going to be your teacher.

(118) ṣükʷiqsakniš Ken
  ṣükʷiqsuʔaʔ niš Ken
  brother -POSS-1PL.IND Ken
  Ken is our brother

(119) ḥawīʔuksiš John
  ḥawīt’-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.
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 ʰaʰiɾiˈsiːʃ John ʰaʰiɾiˈ -uk -siš John chief -POSS-1S.IND John John is my chief.

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.
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 subject.
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), syntactic locality (4.4.3), and the ability of a possessed WH-word to incorporate into the auxiliary -aq.

In section 4.5, I discuss the broader theoretical implications of the possessor extraction analysis proposed here. The final part of this chapter compares the analysis proposed here with other accounts of "possessor raising" constructions 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 also 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. ?ayaqsiʔ is c'apacukʔi John
    ?aya-qs -ʔis c'apac-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. ?ayaqsukʔis John c'apac
    ?aya-qs -uk -ʔis John c'apac
    lots -in.a.vessel-POSS- 3IND John canoe
    There’s lots in John’s canoe. / John’s canoe is holding lots.
(123) a. natpiqʔiš ʔišʔišinʔaʔi Adam
natpiq -ʔiš ʔišʔišin -ʔa ΐ Adam
bump\(^35\) -INAT-3 Adam
S/he clipped Adam’s leg.

b. natpiqʔatʔiš ʔišʔišin Adam
natpiqʔat -ʔiš ʔišʔišin Adam
bump-INAT-3IND foot/feet Adam
Adam’s foot got clipped.

(124) naatsiʔičiʔitsiš piiʔpis [yaaq “ʔatuk”išíš məčiʔat ʔiniʔe]
naatsiʔiš -mit -siš piiʔpis
see -PERF-PST-1S.IND cat
[yaaq -ʔuuk “ʔi”-ʔat -uk -mit -iis məčiʔat ʔiniʔe]
[REL-do.to -PASS-POSS-PST-1S.IREL bite-PASS dog]
I saw the cat [that my dog was bitten by].
(I saw the cat [that bit my dog].)

(125) sukʷiŋkaniʔitsiš ʔumʔiʔiq(sakqs) waaʔat ʔin [çiʔatapʔaqxatuksa papiʔatqs]
sukʷiŋk-ʔat -mit -siš ʔumʔiʔiqsu(-ʔaʔ -qs) waaʔat ʔin
teasing-PASS-PST -1S.IND mother (-POSS-1S) say-PASS that
[çiʔ -ʔatʔap -ʔaqx -ʔat -uk -sa papiʔ -at -qs]
[cut-away.from -TEMP -PASS-INAT\(^36\) -INAT-1S 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 huupukʷasukʔi ʔuusʔatgyuʔi
witq -ʔiš huupukʷas-uk -ʔi ʔuusʔatgyu-ʔi
ugly-3IND car -POSS-3 doctor -DET
The doctor’s car is ugly.

a. witqukʔiš huupukʷas ʔuusʔatgyuʔi
witq-uk -ʔiš huupukʷas ʔuusʔatgyu-ʔi
ugly-POSS-3IND car doctor -DET
The doctor’s car is ugly.

\(^35\) The root natpiq 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.

\(^36\) Morphological identity avoidance will be discussed in section 2.5.3. The manifestation of the inalienable morpheme in the guise of the alienable form here is unrelated to the alternation discussed in section (3.1).
(127) a. huumhuumạʔiš tiičmaatqəs  
    huum-huum  -a  -ʔiš  tiičma-ʔat  -qs  
    R  -in.up/down.motion-CONT-3IND  heart  -INAL-1S  
    My heart is beating fast.

b. huumhuumats tiičma  
    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, where a 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. Unfortunately, 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) ticiʔatukəs mukṣiʔakəqs Adam  
    ticiʔ  -ʔat  -uk  -siš  mukṣiʔ  -ʔak  -qs  Adam  
    throw -PASS -POSS-1S.IND  rock -POSS -1S  Adam  
    My rock was thrown by Adam.

(129) witqukʔis huupukʷasukʔi ῥuustaqyuʔi  
    witq-uk  -ʔiš  huupukʷas-uk  -ʔi  ῥuustaqyu-ʔi  
    ugly-POSS-3IND  car -POSS-3  doctor-DET  
    The doctor’s car is ugly.

(130) kʷyaapəʔatukʔis ćapacukʔi Ken  
    kʷa  -yaap  -ʔat  -uk  -ʔiš  ćapac-uk  -ʔi  Ken  
    break-CAUS-PASS -POSS-3IND  canoe-POSS-3  Ken  
    Ken’s canoe got broken (by him/her).
My son killed a deer.

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

We have seen 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 sequence. However, in this environment the inalienable POSS manifests as the alienable POSS -uk/-ʔak, which suggests -uk/-ʔak is not really ‘alienable’, but rather the ‘unmarked’ or ‘default’ form.

non-raised form: inalienable possessive -ʔat on possessum

(133) čiʔatamitwaʔis Vincent ʔapiiʔatʔi
či -ʔatap -mit-waʔis Vincent ʔapii -ʔat -ʔi
Cut-away.FROM-PST-3QUOT Vincent ear -INAL -3
It is said Vincent [Van Gogh] cut his [own] ear off.

(134) kwʔayaamitʔis čims ʔaʔapyumʔatʔi John
kwʔa-ʔaap -mit-ʔis čims ʔaʔapyum-ʔat-ʔi John
Break -CAUS-PST-3IND bear arm/shoulder-POSS -3 John
A bear broke John’s arm.

---

37 This example is from the Ucluelet dialect.
Passive possessor raised form: inalienable -?at becomes -uk on predicate

(135) čiʔataʔatukʷitwaʔiš Vincent ʔapii
či -ʔatap -ʔat -uk -mit -waʔiš Vincent ʔapii
cut-away.from-PASS-PASS-PST-PST-QUOT Vincent ear
It is said Vincent’s ear got cut off (by somebody).

(136) kʷaʔyaʔatukʷitwiš John ʔaʔapuyumt++ (ʔuhʔat) ʔiims
kʷa -yaap -ʔat -uk -mit -ʔiš John ʔaʔapuyum++ (ʔuhʔat) ʔiims
broken-CAUS-PASS-POSS-PST-3IND John arm/shoulder ((by) bear)
John’s arm was broken (by a bear).

(137) ʔuʔipatuksiš nica ʔiikšiʔat
ʔuʔip -ʔat -uk -siš nica ʔiikši -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. 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, 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) (Wojdak 2004a, Davidson 2002, Rose 1981).
Possessive marked on the argument: agreement matches Subj

(138)a. wiwiśsaq?is pỉśpiśukqs
   wi -wiwiśsaq-ʔis pỉśpiś-uk-qs
   R -lazy -3IND cat -POSS-1S
   My cat is lazy.

(139)a. qaḥsaapma ḥawiʔaƛukqs muważ
   qah-sap-ma ḥawiʔa-uk-qs muwač
die-CAUS-3IND boy -POSS-1S deer
   My boy killed a deer.

(140)a. hininʔakʔis ḥaaʔiʔaʔiʔitk
   hini -ʔak-ʔis haaʔiʔa-uk-ʔitk
   arrive -TEMP-3IND son -POSS-2S
   Your son arrived.

(141)a. capxsiʔiʔis ʔaʔakʔiʔaʔat
   capx-šik -ʔis ʔaʔak-uk-ʔat
   boil -PERF-3IND water-POSS-3-PL
   Their water started boiling

(142)a. yaaʔakʔis ʔiʔiʔiʔatqs
   yaa -ʔak-ʔis ʔiʔiʔiʔ-ʔat-qs
   sore -DUR-3IND lower.leg-INAL-1S
   My feet are sore.

Possessive marked on the predicate: agreement matches subject’s PSR

(138)b. wiwiśsaqʔukis pỉśpiś
   wi -wiwiśsaq-uk -siś pỉśpiś
   R -lazy -POSS-1S,IND cat
   My cat is lazy.

(139)b. qaḥsaapukʔah ḥawiʔaƛ muwač
   qah-sap -uk -mah ḥawiʔa-ƛ muwač
die-CAUS-POSS-1S,IND boy deer
   My boy killed a deer.

(140)b. hiniʔakʔick ḥaaʔiʔaʔ
   hini -ʔak -uk -ʔick ḥaaʔiʔa
   arrive -TEMP -POSS -2S,IND son
   Your son arrived.

(141)b. capxsiʔiʔitaik ʔaʔak
   capx-šik -uk -ʔis -ʔat ʔaʔak
   boil -PERF -POSS -3IND-PL water
   Their water started boiling

(142)b. yaaʔakats ʔiʔiʔiʔ
   yaa -ʔak -ʔat -siś ʔiʔiʔiʔ
   sore -DUR -INAL -1S,IND lower.leg
   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) is not 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 (O) features (example (21) repeated here as (143)).

41 The inflection and agreement morphemes differ from the Ahousaht examples used elsewhere: this is from the Ucluelet dialect.
42 Adding possession to ḥaaʔiʔaƛ (boy) or ḥaaʔkʔaʔ (girl) creates the readings son, daughter, respectively.
43 Example (142a-b) adapted from Kammler et al (1997:40).
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

\[
\begin{array}{c}
\text{C'}
\end{array}
\]

\[
\begin{array}{c}
\text{MoodP}
\end{array}
\]

\[
\begin{array}{c}
\text{Mood-Agr}
\end{array}
\]

\[
\begin{array}{c}
-\text{siš}
\end{array}
\]

\[
\begin{array}{c}
3
\end{array}
\]

\[
\begin{array}{c}
\text{T'}
\end{array}
\]

\[
\begin{array}{c}
\text{vP}
\end{array}
\]

\[
\begin{array}{c}
\text{v'}
\end{array}
\]

\[
\begin{array}{c}
\text{VP}
\end{array}
\]

\[
\begin{array}{c}
[+3]
\end{array}
\]

\[
\begin{array}{c}
t_{\text{Adam}}
\end{array}
\]

\[
\begin{array}{c}
\text{hawi-f}
\end{array}
\]

\[
\begin{array}{c}
\text{Poss'}
\end{array}
\]

\[
\begin{array}{c}
\text{nP}
\end{array}
\]

\[
\begin{array}{c}
\text{n'}
\end{array}
\]

\[
\begin{array}{c}
\text{DP_{subj}}
\end{array}
\]

\[
\begin{array}{c}
\text{John}
\end{array}
\]

\[
\begin{array}{c}
\text{DP_{PSG}}
\end{array}
\]

\[
\begin{array}{c}
(1S)
\end{array}
\]

\[
\begin{array}{c}
[+1S], [+\text{POSS}]
\end{array}
\]

\[
\begin{array}{c}
\text{hawi-fuksiš John}
\end{array}
\]

\[
\begin{array}{c}
\text{hawi-f -uk -siš John}
\end{array}
\]

\[
\begin{array}{c}
\text{chief -POSS-1S.IND John}
\end{array}
\]

\[
\begin{array}{c}
\text{John is my chief.}
\end{array}
\]
The crucial difference between possessed nominal predicates and PR is the obligatory presence of a possesed subject with PR\textsuperscript{44}. 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 (144)-(146).

(145) a. c'iciisaqhtum?i\textsuperscript{is} ?iihkumc\textsuperscript{at}i
   c'iciisaqhtum-wa?i\textsuperscript{s} ?iihkumc-\textsuperscript{at} -i
   toe -\textsuperscript{3QUOT} thumb -\textit{INAL}-\textsuperscript{3}
   Now his thumb is a toe.\textsuperscript{45}

b. c'iciisaqhtum\textsuperscript{at}wa?i\textsuperscript{s} ?iihkumc
   c'iciisaqhtum-\textsuperscript{at} -wa?\textsuperscript{i} ?iihkumc
   toe -\textit{INAL}-\textsuperscript{3QUOT} thumb
   Now his thumb is a toe.

(145) nunuukma\textsuperscript{suq}uq\textsuperscript{witsi}\textsuperscript{s} ?uu\textsuperscript{ataqyu}
   nu-nuuk-ma\textsuperscript{suq}-u\textsuperscript{k} -mit-si\textsuperscript{s} ?uu\textsuperscript{ataqyu}
   R -sing -expert-\textbf{POSS}-PST-1S.IND healer
   My doctor used to be a singer.

(146) ?uu\textsuperscript{ataqyu}wa\textsuperscript{itsuksis} t\textsuperscript{ana}
   ?uu\textsuperscript{ataqyu-wita} -uk -si\textsuperscript{s} t\textsuperscript{ana}
   healer -“gonna”-\textbf{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:

\textsuperscript{44} Notably, all the structural components necessary to trigger PR are present in the underived possessor structures of both argument and predicate position. Nothing need be additionally posited to allow PR to occur.

\textsuperscript{45} This is the end of a story about a man whose severed finger is surgically replaced with a toe.
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.
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 borne out in the data (4.1). In the structure (29) below, PossP is assumed to be projected within the possessive DP, and the entire DP moves to determine third person agreement (of the possessor) rather than first person agreement (of the possessor).
(149) **Alternate form: non-raised possessor**

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 (149) 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.

(150) **Association of agreement feature with the Subject DP:**

<table>
<thead>
<tr>
<th></th>
<th>[+Φ] assigned?</th>
<th>[+Φ] assigned?</th>
</tr>
</thead>
<tbody>
<tr>
<td>POSS on predicate</td>
<td>*</td>
<td>✓</td>
</tr>
<tr>
<td>POSS on PSM</td>
<td>✓</td>
<td>*</td>
</tr>
</tbody>
</table>
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 where 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 (151).

(151) **Possessor raising with a verbal predicate**

```
C'  
  CP
  
  MoodP
  
  Mood'
  
  -ʔis
  3.IND [+3]
  Poss'
    
  Poss [+]POSS
    
  vP
  
  v'
  
  VP
  
  DP
  △
  
  DP[POSS]
  
  cat
  
  chase
  
  caaskʷaʔiňh
  
  tiičawitasukʔick ŋuučma
  
  tiiča -witas -uk -uk -ʔičk ŋuučma
  teacher -plan.to -DUR -POSS -2S.IND woman

Your wife is going to be a teacher.
```

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 constructions have clause-level PossP while non-raising constructions, whether nominal or verbal, do not. Further evidence for clause-level PossP is provided by examples where other clause-level heads intervene between a nominal predicate and POSS, as in (152)-(153). 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.

(152) tiičawitasukʔick ŋuučma
  
  tiiča -witas -uk -uk -ʔičk ŋuučma
  
  teacher -plan.to -DUR -POSS -2S.IND woman

Your wife is going to be a teacher.
(153) hačumśiqsučičuks ʔuusų̱msuǩq̌s  
hačumśiqsu-šic -uk -sis ʔuusų̱ms-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.

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 the 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 (154a-b).  

46 I am very grateful to Lisa Matthewson and Henry Davis for pointing this out to me. The existence of this "third" subject position is mandated by the syntactic treatment of passive in NCN which I adopt (Kim 2000), together with my other 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).

47 Disjoint reference is expressed with the addition of the causative marker -ʔap.
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

The 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 tPSR] is the only participant permitted to control the 'embedded' subject PRO of the complex predicate. The underlying subject
(the possessive DP Florence's teacher) is therefore shown to remain syntactically active in PR form, as though PR has never taken place.

\[(156)\]

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 auxiliary -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 (157).
Without the auxiliary, subject incorporation is bad (158).

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 auxiliary -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:

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 (159)-(160), 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 structure 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 (161b) cannot be associated with the object argument. In cases where the only available possessee is an object, the raised version of a possessive utterance is ungrammatical for a possessed object interpretation:

(161) a. ṇaatsii-ci9c-mit-?iš Lucy čapac-uk-qs
    ṇaatsii-ci9c-mit-?iš Lucy čapac-uk-qs
    see-PERF-PST-3.IND Lucy canoe-POSS-1S
    Lucy saw my canoe.

b. # ṇaatsiici9c-mit-?iš čapac Lucy
    ṇaatsiici9c-mit-?iš čapac Lucy
    see -PERF-POSS-PST-1S.IND canoe Lucy
    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).

(162) ?u-yu9aat-uk-si9c hupkumt- tiniιk
    ?u-yu9aat-uk -si9c hupkumt- tiniιk
    Ø- find -POSS-PST-1S.IND ball dog
    My dog found a ball. (Wojdak, p.c.)

(163) ma9cιk-witsi9c tiiia9k tiicu
    ma9cιk -uk -mit -si9c tiiia9k tiicu
    bite -POSS-PST-1S.IND dog teacher
    My dog bit a teacher.

(164) qahsaapuk-wa9 hawiιa9 ma9wac48
    qah-sap -uk -mah hawiιa9 ma9wac
    die-CAUS-POSS-1S.IND boy deer
    My son killed a deer.

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

48 Ucluelet dialect
(165) ?ucqakuk?icuus
?ucq-ak -uk -?icuus
. fog -DUR-POSS-2PL.IND
Your (your place) is foggy.

(166) nunuukuk*it?iš ?uuštaqyu Rachel
nu-nuuk-uk -mit -?iš ?uuštaqyu Rachel
R-sing-POSS-PST-3IND healer Rachel
Rachel’s doctor was singing.

(167) capxši?uk?iš?at ča?ak
capx-ši?k -uk -?iš -?at ča?ak
boil -PERF-POSS-3IND-PL water
Their water started boiling

(168) ha?ukuk?ick cims
ha?uk-uk -?ick cims
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.

(169) a. ţiči?iš Adam műks?i?ak?i
ţiči -?iš Adam műks?i?ak -?i
throw-3.IND Adam rock -POSS-3
Adam threw his (own or another’s) rock.

b. ţiči?atuk*it?iš Adam műks?i
ţiči -?at -uk -mit -?iš Adam műks?i-?i
throw-PASS-POSS-PST-3.IND Adam rock -DET
His/ Her rock was thrown by Adam.

c. # ţiči?uk?iš Adam műks?i
ţiči -uk -?iš Adam műks?i
throw-POSS-3.IND Adam rock
* Adam threw his rock. ✓ Adam’s rock threw something.

In fact, in cases like (46b), 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\(^4\), this provides supporting evidence that PR must take place only from subject positions.

\(^4\) 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 bad:

(170) *?uk"iiFmahsa?is Florence č'apac tičaak?i
    ?uk"iiF-mahsa-?i Florence č'apac tiča -ak -?i
    make -want -3.IND Florence canoe teacher-POSS-3

raised; element inserted between PSM and PSR is good:

(171) ?uk"iiFmahsatuć?i Florence č'apac tičaak?i
    ?uk"iiF-mahsa-?at -uk -?is Florence č'apac tiča -ak -?i
    make -want -PASS-POSS-3.IND Florence canoe teacher-POSS-3

Florence’s teacher 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 (170), the same test shows the PSM and PSR no longer form a constituent in the possessor raised construction. (171).

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 (172a-b) below, when the possessive marker -uk is placed above the relative pronoun in the domain of the main predicate, the possessive relation must be interpreted within the matrix clause.

(172) a. ḷikšįitsiš čakup yaqitii pawał-sap hiishiisač'akukqs
    ḷikšį -šiš čakup yaq-it -ii pawał-sap hiishiisač'ak -uk -qs
    hit-PERF-PST-1S.IND man who-PST-3L.REL loose -CAUS axe -POSS-1S
    I hit the man who lost my axe.

b. ʾixkišitiš ʾakup yaqatukʷitiš pawašapat hiišišačak
 ʾixkiši- -mit -siš ʾakup yaq-ʔat -uk -mit -iis pawaš-sap ʔat hiišišačak
hit -PERF-PST-1S.IND man who-PASS-PST-1S.IND loose-CAUS-PASS axe
I hit the man who lost my axe. (I hit the man by whom my axe was lost.)

c. ʾixkišišukʷitiš ʾakup yaqitii pawašap hiišišačak
 ʾixkiši-šuk -mit-siš ʾakup yaq-mit-ii pawaš sap hiišišačak
hit-PASS-POSS-PST-3I.REL man who-PASS-PST-3I.REL loose-CAUS axe
*I hit the man who lost my axe./ ✓ My husband 50 hit [him] who lost an axe. 51

The available interpretation of (172c) 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.

(173) *ʔu-yuʔaatukʷitiš ʔiiniixukqsif ʔu-yuʔaat-uk-mit -siš ʔiiniix-uk-gs-ʔi hupkum†
 ʔu-yuʔaat-uk-mit -siš ʔiiniix-uk-gs-ʔi hupkum†
ʔ-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, whether the latter occurs in the clausal or in the DP-domain 52.

(174) *wiwišʔaqkukʔis ʔaŋʔi tiča
 ʔiiniix-ʔaqk-uk-ʔiš ʔaŋʔ-ʔi tiča
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.”

50 A possessive on man or woman indicates one’s husband or wife, respectively.
51 My consultant tells me that “My husband hit the one who lost an axe,” would be more clearly expressed thus:
   i. ʾixkišišukʷitiš ʾakup ṣuhtaa yaqitii pawašsap hiišišačak
      ʾixkiš-uk-mit-siš ʾakup ʔuhtaa yaq-ii pawaš sap hiišišačak
      hit-PASS-POSS-PST-3I.REL man one-to.smone who-PASS-3I.REL loose-CAUS axe
      My husband hit the one who lost an axe.
52 As is expected, adding the determiner to the possessor is fine, and leads to an unmarked PSM-PSR order interpretation.
   i. wiwišʔaqkukʔis ʔaŋ tiča
      wiwiš-ʔaqk-uk-ʔiš ʔaŋ tiča-ʔi
      lazy-TEMP-POSS-3IND child teacher-DET
      ✓ The teacher’s child is lazy.
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. Cinqué (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 just in case Spec,DP is available as an escape hatch.

4.5.2 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.

(177) a. ḥawirțuksiš čakupʔi
   ḥawirț -uk -siš čakup -ʔi
   chief -POSS-1S.IND man -DET
   The man is my chief.

b. ḥawirțuksiš čakup
   ḥawirț -uk -siš čakup
   chief -POSS -1S.IND man
   My husband is a chief / * The/A man is my chief.
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 - dł.

### 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 different, it is shown that the analysis 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:

(179) a. \[ GEN-ACC \] possessive phrase

Vampire-ka Buffy-euy son-lul tayli-ess-ta
vampire-nom Buffy-gen hand-acc hit-past-decl
“The vampire hit Buffy’s hand.”

b. \[ GEN-ACC \] possessive phrase

Vampire-ka Buffy-lul son-lul tayli-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 (179b) 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.

(180) Tomioka and Sim’s recursive VP structure

\[
\begin{array}{c}
\text{VP1} \\
\text{possessor} & \text{V1'} \\
\text{VP2} & \text{V1} & \text{V2} \\
\text{possessee}
\end{array}
\]

In support of a recursive VP structure, T&S point out that both possessor and possessum NP can be relativized (181), and that the possessum NP can be modified (182).

(181) Relativizing the PSM is possible

\[\text{Chelswu-ka Sunhee-lul t; ttali-n} \text{ ppanij} \]
Chelswu-nom Sunhee-acc hit-rel cheek
The cheek where Chelswu hit Sunhee.

(182) Modifying the PSM is possible

\[\text{Chelswu-nun Sunhee-lul tachi-n son-ul cap-ass-ta} \]
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 fascinating 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 PSM to Spec, MoodP) is exactly the property of Korean that T&S intend to capture. They argue that the Korean Multiple Accusative form 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.
(183) a. *non-raised:*

\[\text{\textit{ Searches for \textit{hinaqstatqin} } \textit{ Ku} - \text{\textit{ya}} - \text{\textit{cik}} - \text{\textit{ni\textbullet s}} \text{\textit{hinaqst\textbullet i}}} \text{\textit{ good-\textit{CONT-PERF-3.IND thoughts-IN\textbullet AL-1\textbullet PL}}}

We are happy./ We are feeling good. (Literally “Our thoughts are good.”)

b. *possessor-raised:*

\[\text{\textit{ Searches for \textit{hinaqst\textbullet i} } \textit{ Ku} - \text{\textit{ya}} - \text{\textit{cik}} - \text{\textit{ni\textbullet s}} \text{\textit{hinaqst\textbullet i}}} \text{\textit{ good-\textit{CONT-PERF-IN\textbullet AL-2\textbullet PL.IND thoughts}}}

We are happy./ We are 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.

(184) b. \textit{ci\textbullet atap\textbullet atukwa\textbullet is Vincent papii}\_\_\_
    \textit{ci - \textbullet atap - \textbullet at - \textbullet uk - wa\textbullet i\textbullet s Vincent papii}\_\_\_
    \textit{cut-away.from-PASS-IN\textbullet AL- 3QUOT Vincent ear}
    (It’s said) Vincent’s ear got cut off.

a. \textit{ci\textbullet atamatwa\textbullet is Vincent papii\textbullet ati}\_\_\_\_\_\_
    \textit{ci - \textbullet atap - mit - wa\textbullet i\textbullet s Vincent papii - \textbullet at - \textbullet i}
    \textit{cut-away.from-PST- 3QUOT Vincent ear-IN\textbullet AL-3}
    (It is said) Vincent cut his own ear off.

Although it has been argued that the Korean Multiple Accusative construction is a form of possessor raising (Choe 1986, Cho 2000) in that the possessor and possessum no longer form a single constituent, Tomioka and Sim’s recursive VP analysis cannot be readily extended to the possessor raising construction in NCN. The differing facts of Korean and NCN therefore present a challenge for any universal analysis of external possessive constructions.

\[\text{(184) i. ? ci\textbullet atap\textbullet atukwa\textbullet is Vincent}
    \textit{ ci - \textbullet atap - \textbullet at - \textbullet uk - wa\textbullet i\textbullet s Vincent papii - \textbullet at - \textbullet i}
    \textit{cut-away.from-PASS-PST- 3QUOT Vincent ear-IN\textbullet AL-3}
\]

53 The parallel form of (184b) 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 2.2.5 and 2.2.6, and is not parallel to the Korean intuition such that Vincent should no longer own the ear.
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).

(185) a. \[[\text{DP Mary-no kami-ga naga-i}]\]  
[Mary-GEN hair-NOM long-be]  
Mary’s hair is long.

b. \[\text{Mary-ga t_k kami-ga naga-i}\]  
Mary-NOM [hair-NOM long-be]  
Mary’s hair is long.

(186) a. \[[\text{DP John-no kuruma-ga seibifuryoo-da}]\]  
[John-GEN car-NOM ill-conditioned-be]  
John’s car is ill-conditioned.

b. \[\text{John-ga kuruma-ga seibifuryoo-da}\]  
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 (first # above); while alienable possessors (second # above) 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 (4.3.1), the underlying subject determines subject control of a lower PRO, 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 process 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 Nuu-chah-nulth possessive structures and derivations, including the under-described and typologically unusual possessor raising 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 possessor in person and number, rather than the possessed subject.

iii. The possessor and possessum do not form a 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 where it originates, 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] 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 -?'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.

54 Or alternatively, the projection that represents the output 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 only 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 to adjunct or “chomeaur” status. This type of construction is observed in Bantu (Baker 1988), Salish (Gerds, 1989, H. Davis, p.c.), European languages (Haspelmath 1999), and Hebrew (Landau 1998), among many others.
(187) **Swahili**

a. Juma a-li-(ki)-ata kidole cha Asha
   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
   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)

(188) **St’át’imcets (Lillooet Salish)**

?acx-xit-ás =kʷuʔ ta =taxʷʔač-š =a
see -APPL-3ERG=QUOT DET=bow -3POS=EXIS
Then hej saw hisj bow. (Literally: Then hej saw for/to himj hisj bow.)

(Henry 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 1999), use possessor raising with both objects and subjects. These are less common than languages exhibiting object-only raising, but they are not rare.

(189) **Muskogean Object possessor raising**

a. Off’-at ihoo im-pask -á apa-tok
   dog-SUB woman 3/III-bread-OBL eat-PAST
   1NP]-at 1NP PSR PSM]-á
   The dog ate the woman’s bread.

b. Off’-at ihoo-á paska im-apa-tok
   dog-SUB woman-OBL bread 3/III-eat-PAST
   1NP]-at 1NP PSR]-á 1NP PSM]
   The dog ate the woman’s bread. (Munro 1984)

---

55 In this example the numbers indicate affiliation with different noun classes.
56 Here, numbers refer to person and Roman numerals refer to word classes.
57 As cited by Bessell (1992:16)
(190) 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.)

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 1999) and, clearly, NCN defy that generalization. In both languages, possessor raising occurs exclusively with subjects. The Japanese examples in (191) are parallel to the Korean examples in (192); but while the Japanese equivalents of the Korean subject PR cases are grammatical, equivalents of the Korean object PR cases are ungrammatical in Japanese.

(191) 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.

b. * John-ga Mary-o atama-o nagut -ta object raised
   John-NOM Mary-ACC head-ACC hit-PAST
   John hit Mary’s head.

(192) 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)

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)

58 As cited by Bessell (1992:2).
The distribution of possessor raising with respect to argument position is summarized in the diagram below:

(193) **possessor raising and argument position**

<table>
<thead>
<tr>
<th>Subject only</th>
<th>Subject and Object</th>
<th>Object only</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Japanese</strong></td>
<td>Chickasaw</td>
<td>Salish</td>
</tr>
<tr>
<td>Nuu-chah-nulth</td>
<td>Choctaw</td>
<td>Bantu</td>
</tr>
<tr>
<td>Nyulnyulan</td>
<td>French</td>
<td></td>
</tr>
<tr>
<td>Maricopa</td>
<td>Spanish</td>
<td></td>
</tr>
<tr>
<td>Korean</td>
<td>Hebrew</td>
<td></td>
</tr>
</tbody>
</table>

As I have shown, NCN is free of lexical restrictions on subject PR, and furthermore PR may occur with any type of predicate. 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 these languages are complementary to NCN in that they are restricted to objects. 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).

(194) **Lexical restrictions and possessor raising**

<table>
<thead>
<tr>
<th>Argument</th>
<th>Predicate</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korean</td>
<td>Chickasaw</td>
<td>Hebrew</td>
</tr>
<tr>
<td>Japanese</td>
<td>Choctaw</td>
<td>Nuu-chah-nulth</td>
</tr>
<tr>
<td>Nyulnyulan</td>
<td>Maricopa</td>
<td>Spanish</td>
</tr>
<tr>
<td>Bantu</td>
<td></td>
<td>(French)</td>
</tr>
</tbody>
</table>

In the chart above lexically restricted languages are divided into two types: those that are restricted by argument allow only inalienable possessors to raise, while the others allow a possessor to raise only with certain predicates or types of predicates.

In comparing both levels of classification at once, I propose the following table of possessor raising languages:
Cross-linguistic distribution of possessor raising

<table>
<thead>
<tr>
<th></th>
<th>Subject PR only</th>
<th>Subject and Object PR (via one construction)</th>
<th>Object PR only</th>
</tr>
</thead>
<tbody>
<tr>
<td>lexically restricted</td>
<td>Japanese</td>
<td>Chickasaw, Choctaw, Maricopa, Nyulnyulan, Korean</td>
<td>Bantu</td>
</tr>
<tr>
<td>lexically non-restricted</td>
<td>Nuu-chah-nulth</td>
<td>?</td>
<td>French, Hebrew, Salish, Spanish</td>
</tr>
</tbody>
</table>

To my knowledge, there is no language exhibiting a possessor raising construction that is free of both argument position and lexical restrictions. Nuu-chah-nulth however appears to be unique in that is restricted to subjects but free of lexical or semantic restrictions.
REFERENCES


Swadesh, Morris. 1933. The internal economy of the Nootka word. Doctoral dissertation, Yale University.


Woo, Florence. in prep. Recent research on Nuu-chah-nulth syntax. 2004 Ms.

Appendix I: Paradigms

Ahousaht indicative agreement paradigm:

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>haʔuk-šis eat -1S.IND</td>
<td>haʔuk-šis eat -1PL.IND</td>
</tr>
<tr>
<td></td>
<td>I am eating</td>
<td>We are eating</td>
</tr>
<tr>
<td>2nd</td>
<td>haʔuk-ʔick eat -2S.IND</td>
<td>haʔuk-ʔicuuš eat -2PL.IND</td>
</tr>
<tr>
<td></td>
<td>You-sg are eating</td>
<td>You-PL are eating</td>
</tr>
<tr>
<td>3rd</td>
<td>haʔuk(-ʔiš) Ken eat (-3IND) Ken is eating</td>
<td>haʔuk(-ʔiš-(ʔa+)) Ken &amp; Kay eat (-3.IND-(PL)) Ken &amp; Kay are eating</td>
</tr>
</tbody>
</table>

Ahousaht possessive agreement paradigm (Ahousaht dialect)

non-possessed:

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>ṭičịx̣-mit-ʔiš Adam āmuḳśi</td>
<td>ṭičịx̣-mit-ʔiš Adam āmuḳśi</td>
</tr>
<tr>
<td></td>
<td>throw-PST-3IND Adam rock/stone</td>
<td>throw-PST-3IND Adam rock/stone</td>
</tr>
<tr>
<td></td>
<td>Adam threw a rock</td>
<td>Adam threw a rock</td>
</tr>
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</table>

possessed:

<table>
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<th>Plural</th>
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</thead>
<tbody>
<tr>
<td>1st</td>
<td>ṭičịx̣-mit-ʔiš Adam āmuḳśi-ʔak-qs Adam rock- POSS-1S</td>
<td>ṭičịx̣-mit-ʔiš Adam āmuḳśi-ʔak-qin Adam rock- POSS-1PL</td>
</tr>
<tr>
<td></td>
<td>throw-PST-3IND Adam rock- POSS-1S</td>
<td>throw-PST-3IND Adam rock- POSS-1PL</td>
</tr>
<tr>
<td></td>
<td>Adam threw my rock</td>
<td>Adam threw our (in-/exclusive) rock.</td>
</tr>
<tr>
<td>2nd</td>
<td>ṭičịx̣-mit-ʔiš Adam āmuḳśi-ʔak-ʔitk Adam rock- POSS-2S</td>
<td>ṭičịx̣-mit-ʔiš Adam āmuḳśi-ʔak-ʔtqsuu Adam rock- POSS-2PL</td>
</tr>
<tr>
<td></td>
<td>throw-PST-3S.IND Adam rock- POSS-2S</td>
<td>throw-PST-3S.IND Adam rock- POSS-2PL</td>
</tr>
<tr>
<td></td>
<td>Adam threw your-Sg rock</td>
<td>Adam threw your-PL rock</td>
</tr>
<tr>
<td>3rd</td>
<td>ṭičịx̣-mit-ʔiš Adam āmuḳśi-ʔak-(ʔi) Adam rock- POSS-3</td>
<td>ṭičịx̣-mit-ʔiš Adam āmuḳśi-ʔak-(ʔi)-(ʔa+) Adam rock- POSS-3-PL</td>
</tr>
<tr>
<td></td>
<td>throw-PST-3S.IND Adam rock- POSS-3</td>
<td>throw-PST-3S.IND Adam rock- POSS-3-PL</td>
</tr>
<tr>
<td></td>
<td>Adam threw his (own or another's) rock.</td>
<td>Adam threw their (in- or exclusive) rock.</td>
</tr>
<tr>
<td>3rd</td>
<td>ṭičịx̣-it-ʔiš Adam āmuḳśi-ʔak-(ʔi) Henry throw-PST-3S.IND Adam rock- POSS-(3)</td>
<td>ṭičịx̣-it-ʔiš Adam āmuḳśi-ʔak-(ʔi)-(ʔa+) Henry throw-PST-3S.IND Adam rock- POSS-(3)</td>
</tr>
<tr>
<td></td>
<td>throw-PST-3S.IND Adam rock- POSS-(3)</td>
<td>throw-PST-3S.IND Adam rock- POSS-(3)</td>
</tr>
<tr>
<td></td>
<td>Adam threw Henry's rock</td>
<td>Adam threw Henry's rock</td>
</tr>
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</table>
Makah possessive paradigm

<table>
<thead>
<tr>
<th></th>
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<tr>
<td>1st</td>
<td>=siš</td>
<td>=dis</td>
</tr>
<tr>
<td>2nd</td>
<td>=sic</td>
<td>=saqsa / =sicaa</td>
</tr>
<tr>
<td>3rd</td>
<td>='uuc</td>
<td>='uča'</td>
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Word structure

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<tr>
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<th>lexical suffixes</th>
<th>aspect suffix</th>
<th>clitics</th>
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<td>unextended word</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>extended word</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ahousaht independent pronouns

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>siya</td>
<td>niiwa</td>
</tr>
<tr>
<td>2</td>
<td>suwa</td>
<td>siiwa</td>
</tr>
</tbody>
</table>
Appendix II: Inalienable possession versus the “passive” marker

Since the inalienable possessive morpheme -?at is formally identical to what I assume to be the passive morpheme -?at, 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 -?at.

First, I will show that the two uses of -?at 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 -?a/-as-passive and -?at -as-inalienable may appear.

<table>
<thead>
<tr>
<th>Distribution</th>
<th>&quot;PASS&quot;</th>
<th>&quot;INAL&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>on transitive predicates</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>on nominal arguments</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>on nominal predicates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>on intransitive predicates</td>
<td>sometimes¹</td>
<td>√</td>
</tr>
<tr>
<td>on passivized predicates</td>
<td>(N/A)</td>
<td>maybe²</td>
</tr>
</tbody>
</table>

-?at as a Passive marker

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

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

   (1) yaa?a^apat?ick (?uh?at) Mary
       yaa -?ak -?ap -?at -?ick (?uh?at) Mary
       care -DUR -CAUS -PASS -2S.IND (by) Mary
       You are loved by Mary/ Mary loves you. (adapted from Kim 2000:3)

¹ Nakayama (1997b, 2001) presents a list of previously undocumented occurrences of -?at on intransitive verbs as evidence against a syntactic passive. Rose and Carlson (1984) furthermore show occurrences of -?at-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 -?at 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 ḥuhat (‘by’) optionally introduces the agent argument, if present.

(2) mɑmɑaqɑ-thiʔaniʔiš Mary (ḥuhat) John
mɑ-mɑaa -qa-hi -ʔat - mit -ʔiš Mary (ḥuhat) John
R bite -leg -PASS-PST-3IND Mary (by) John
Mary was bitten (in the leg) by John.

(3) kɑapɑʔiʔaniʔiš Ken
kɑapɑʔiʔ-iʔ at -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) * yɑʔɑkɑʔɑʔiʔ Mary suwa
yɑ -ʔak -ʔap -ʔat -ʔiš Mary suwa
care -DUR -CAUS -PASS -3IND Mary you
Mary is loved (by) you. (adapted from Kim 2000:5)

(5) * yɑʔɑkɑʔiʔ Mary suwa
yɑ -ʔak -ʔap -ʔiš Mary suwa
care -DUR -CAUS -3IND Mary you
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) My heart is beating fast.
huumhuumats tiičma
R- huum -ʔat -siš tiičma
in.up/down.motion-INL -1S.IND heart
2. Constituency between a PSR and PSM is lost.

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

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 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”. 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 its function with inalienable nominals. Recall the structure of an inalienably possessed DP, adapted here from section 3.4.

inalienably possessed DP

DP

\[\text{DP}\]

\[\text{DP}\]

3 This is the end of a story about a man whose severed finger is surgically replaced with a toe.
An alienable possessor is expected to be generated in an external position of the NP. If the presence of -ʔat promotes an inalienable “argument”, its 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) ?uuxtqyaksiš tiiča
    ?uuxtqyuyuʔak -siš tiiča
    doctor -POSS-1S teacher
    The teacher is my doctor.

(12) ?uuxshqyumsukʔiš ʔuwiq waaʔawa
    ?uuxshqyms-uk -ʔiš ʔuwiq waaʔawa
    relative -POSS-3IND Dad Waatlwa
    Waatlwa is Dad’s friend/relative (Context: between siblings)

(13) ʔuwiqsaksiš
    ʔuwiqsuʔak -siš
    father -POSS-1S
    He is my father.
possessed subject:

(14) muscumuk'iš ṭuustaqyu Kay
muscum -uk -iš ṭuustaqyu Kay
commoner-POSS-3IND healer Kay
Kay’s doctor is a commoner

(15) qur'uukʷitwa'iš Ken ṭuustaqyu
qur'u-uk -mit-wa'iš Ken ṭuustaqyu
slave-POSS-PST-3QUOT Ken healer
Ken’s doctor was a slave.

(16) ṭuustaqyuwit'as ukśiš ńaña
ṛuustaqyu-wit'as -uk -iš ńaña
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 ṭumiqsu
tiiča -ʔak -iš ṭumiqsu
teacher-POSS-1S.IND mother
✓ My mother is a teacher
* The/My mother is my teacher.

(18) ṭuustaqyaksiš ńukʷiiqsu
ṛuustaqyu-ʔak-iš ńukʷiiqsu
doctor-POSS-1S.IND y.sibling
✓ My younger sibling is a doctor
* The younger sibling is my doctor (Context: looking at a photograph of a family)

(19) ḥawiriukuksiš čakup yaqitiī hiniiʔiḵ
ḥawiri-uk-siš čakup yaq-miit-ii ḥiniiʔiḵ
chief-POSS-1S.IND man REL-PST-3.I.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)uk, 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 assume, provisionally, that the two uses of -ʔat must be separate.