

Linearization and prosodic phrasing:  
The case of SENCOTEN second-position clitics

by

Marianne Huijsmans

B.A., University of Victoria, 2013

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## **Supervisory Committee**

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### **Supervisory Committee**

Dr. Martha McGinnis-Archibald, Department of Linguistics  
**Supervisor**

Dr. Ewa Czaykowska-Higgins, Department of Linguistics  
**Departmental Member**

## Abstract

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Dr. Martha McGinnis-Archibald, Department of Linguistics

Supervisor

Dr. Ewa Czaykowska-Higgins, Department of Linguistics

Departmental Member

SENĆOŦEN has a set of second-position clitics (2PCs) ('little', unstressed elements, such as the first person subject *SEN*), following the initial prosodic word (full word) of the clause. This thesis, which studies the distribution of the 2PCs, is divided into two parts: a linguistic analysis and a co-authored teaching appendix. In the linguistic analysis, I propose that 2PCs occur following the initial prosodic word as a result of constraints governing the mapping between syntactic and prosodic structure. In the syntax, I propose that SENĆOŦEN 2PCs occupy positions above the prosodic word that ultimately precedes them. However, a preference for 'strong' left edges of prosodic constituents (intonational units) results in the violation of the constraint governing linearization of the syntactic structure, allowing the clitics to follow the initial prosodic word. The teaching appendix, developed collaboratively with STOLŦEŁ Elliott, employs concepts from the linguistic analysis in a way that is useful for language learners and teachers.

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## Abbreviations

ACC accusative	INTERR interrogative
ACTV activity	INV invisible
ACT actual	IRR irrealis
CAUS causative	LNK linking particle
CM command	LOC locative
CNJ conjunction	NACT nonactual
CNJC conjunctural	NMLZ nominalizer
CNJ.SBJ conjunctive subject	NOM nominative
CONN connective	NPST nonpast
CONTR contrastive conjunction	NTR noncontrol transitive
DAT dative	M masculine
DET determiner	MD middle
DEM demonstrative	MUT mutative
ENC encourage	OBJ object
ERG ergative	OBL oblique
EVD evidential	OPT optative
EXPL explanative	PASS passive
F feminine	PAUC paucal
FUT future	PL plural
GEN genitive	POSS possessive
INF informative	PROC procedural
INFIN infinitive	PRS present

PST past

PTC particle

QUOT quotative

REAS reason

REL relational applicative

REFL reflexive

REQ request information

RLZ realized

S singular

SP specific

STRUC structured activity

SUB subordinating complementizer

TR control transitive

Q yes/no question

√ root

= used for clitics

- used for affixes

\* ungrammatical

~ reduplication

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## **Dedication**

In memory of Anne Jimmy (1945-2015),  
who was among the first of the W̱SÁNEĆ elders to share her language with me.

# Chapter 1

## Introduction

In SENĆOFEN, a set of unstressed, uninflected ‘little words’, known as *second-position clitics* (2PCs), follow the initial prosodic word (first ‘full word’), or stress-bearing unit, of the clause.<sup>1</sup> For instance, in (1), the initial words *YÁ/yé* ‘go’, *ŁÁU/łáw* ‘heal’ and *STÁN/stéŋ* ‘what’ bear word-level stress, while the following 2PCs (in bold) are unstressed and pronounced as a unit with the preceding word.<sup>2</sup>

(1) a. *YÁ, E LE, SW* (Montler, 1986:2-3)

√yéʔ=ə=łəʔ=sx<sup>w</sup>  
√go=Q=PST=2SBJ  
‘Did you go?’

b. *ŁÁU, YEŁ SW* (Montler, 1986:6-7)

√łáw=yəq=sx<sup>w</sup>  
√heal=OPT=2SBJ  
‘I hope you get better.’

c. *STÁN OĆE ŁÁ,E* (Montler, 1986:217)

√stéŋ=ʔačə łéʔə  
√what=REQ DEM  
‘What is this?’

‘Little words’ in SENĆOFEN frequently came to my attention while attending a class in the WSÁNEĆ community offered through the Bachelor of Education in Indigenous Language Revitalization at the University of Victoria. While ‘little words’, such as these 2PCs, are used frequently in SENĆOFEN, they are not always easy to characterize, as we discovered during our classes. This thesis provides a linguistic analysis of their distribution, while the appendices, co-authored with STOLČEŁ Elliot, are intended to

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<sup>1</sup> A word that bears stress gets more emphasis, having one vowel in particular that is louder and longer (e.g. Leonard, 2010).

<sup>2</sup> These ‘little words’ or clitics have vowels that are quieter and shorter than the stressed vowel in the word preceding them.

make the linguistic analysis as useful and accessible as possible for those teaching and learning the language. While the 2PCs offer plenty of intriguing puzzles for satisfying linguistic analysis, I hope that this project is not solely of use to other academics, but also contributes something to the WŚÁNEĆ community, especially to those who welcomed me into their class as a fellow student, teaching me many important lessons about the role of language in culture and identity, and to the elders who have patiently helped me come to understand something about the grammar and intonation structures of the SENĆOFEN SKÁL (language).

Examining the distribution of the 2PCs, it is apparent that though the 2PCs' position in the sentence is easily predicted based on the prosodic structure<sup>3</sup> of the sentence (following the initial prosodic word), the 2PCs do not occur linearly in the position expected based on their semantic scope and syntactic function.<sup>4</sup> SENĆOFEN is syntactically left-headed, meaning that items that occur higher in the syntactic structure and have wider semantic scope generally linearize to the left of items lower in the syntactic structure with narrower semantic scope; that is, a word that occurs early in a sentence, or to the left in the sentence, will influence the meaning and understanding of the words that follow it (occur to its right). Nevertheless, the 2PCs scope semantically over the prosodic word preceding them, yet are linearized to its right. This is more clearly illustrated in (2), where a subject pronoun clitic comes between a modifier and the main predicate (2a) and between two parts of a conjoined predicate (2b-c), while syntactically

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<sup>3</sup> For those unfamiliar with linguistic terminology, 'prosodic structure' refers to intonation patterns.

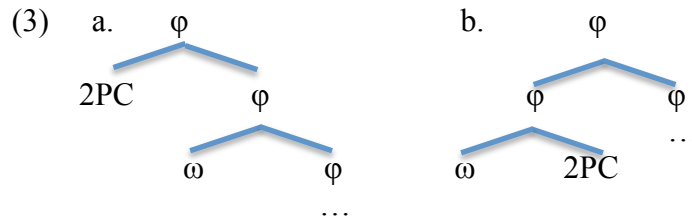
<sup>4</sup> 'Semantics' refers to meaning and 'syntax' to grammatical relationships between words. When we say that a word 'scopes' over another part of the sentence, we mean that it affects in the interpretation or modifies that part of the sentence. For instance, EN,ÁN, 'very' precedes and modifies the contribution of the following predicate OĆEN 'slow' in example (2a) below. This fits with the general pattern in SENĆOFEN where words appearing earlier in the sentence scope over words appearing later in the sentence.

the subject pronoun (in spec-TP) is expected to precede the entire predicate, including modifiers associated with the verb phrase.

- (2) a. EN,ÁN, **SW** U, OĆEN (Fieldnotes, 2015)  
 ʔən√ʔén=**sx**<sup>w</sup> ʔəw̄ √ʔáčəŋ  
 very=**2SBJ** LNK √slow  
 ‘You were really slow.’
- b. EN,Á **SEN** I, YÁ, (Montler, forthcoming a:84)  
 √ʔənʔé=**səŋ** ʔiʔ √yéʔ  
 √come=**1s.SBJ** CNJ √go  
 ‘I come and go.’
- c. ČÁ,ETENs **JE** I, NEWŁKEWÁĆTEN  
 k<sup>w</sup>éʔətəŋ-s=**čə** ʔiʔ nəx<sup>w</sup>łq<sup>w</sup>əwécətəŋ  
 √k<sup>w</sup>e-ət-əŋ-s=**čə** ʔiʔ nəx<sup>w</sup>-√łq<sup>w</sup>=əwəč-ət-əŋ  
 √release-TR-PASS-3POSS=**EVD** CNJ LOC-√slap-bottom-TR-PASS  
 ‘He released him and slapped him on the bottom.’  
 [P.27.16.1] (Montler, forthcoming b)

In this thesis, I argue that 2PC placement in SENĆOFEN is the result of an interaction between linearization of the syntactic structure and mapping of syntactic structure to well-formed prosodic structure. Essentially, this means that the 2PCs appear ‘second’, after the first full word of the sentence, in order that their pronunciation is consistent with the intonation patterns of the language, which prefers ‘heavier’ elements to precede ‘lighter’ elements. On the other hand, they appear near the ‘left edge’ of the sentence, because grammatically they belong ‘high’ or ‘early’ in the sentence, scoping over the word that precedes them and the words that follow them (see fn. 2); for instance, in (2c), the evidential clitic *JE/čə* affects the meaning of the whole sentence, so it appears as near as possible to the ‘left edge’, immediately following the first prosodic word. In linguistic terms, I argue that (3a), where a 2PC is linearized to the left of its host, is not a well-formed prosodic structure, because the language prefers prosodically ‘strong’ left edges.

In clauses with 2PCs, the syntax generates a structure that corresponds to the prosodic structure in (3a), but constraints at the mapping from syntactic to prosodic structure result in the derivation of the well-formed prosodic structure in (3b).



While the preference for strong left edges can be observed in other areas of SENĆOTEN prosody, linearization is only implicated at the edge of the syntactic derivation. This follows from the fact that elsewhere in the structure, it is possible to phrase phonologically ‘light’ material with a preceding phonological constituent, satisfying the preference for phonologically strong left edges by placing ‘light’ material at right edges.

The remainder of the introduction proceeds as follows. Section 1.1 briefly situates this analysis relative to previous approaches to analyzing 2PCs in the cross-linguistic literature. Section 1.2 introduces the theoretical framework and architecture of the grammar assumed throughout this thesis. In section 1.3, I introduce the key mechanisms involved in the analysis. Section 1.4 sketches the predications that follow from these mechanisms within the theoretical framework. Section 1.5 discusses SENĆOTEN, its current status and position within the Salish language family, and the teaching appendices. Section 1.6 introduces the resources, methodology and representation of examples used in this thesis. In section 1.7, I briefly discuss my assumptions regarding the configurationality of Salish clauses. Finally, section 1.8 provides an overview of the thesis.

### 1.1 Second-position clitics

Linguists have long been puzzled by phenomena where unstressed linguistic items, smaller than prosodic words, occur linearly in positions unexpected based on their syntactic function. These items have been termed ‘special clitics’: ‘clitics’ because their inability to bear stress means that they are phonologically dependent, pronounced as a unit with a neighboring prosodic word (their *host*), and ‘special’ because of their unexpected distribution (Zwicky, 1985). *Second-position clitics* (2PCs) are a subclass of ‘special clitic’, so called because they occur ‘second’ in the clause, following an initial constituent that may be prosodically or syntactically defined. The SENĆOTEN clitics in (1) and (2) are 2PCs that follow a prosodically defined initial constituent, a prosodic word.

2PCs are a cross-linguistic phenomenon, occurring in diverse languages, such as Warlpiri (e.g. Hale, 1973; Legate, 2008), Serbo-Croatian (e.g. Halpern, 1992; Schütze, 1994), and Pashto (e.g. Roberts, 2000). 2PCs have been the topic of ongoing debate in the generative literature, because their distribution is sensitive to both syntactic and prosodic factors. That is, the clitics are prosodically deficient and must phrase with a host that is minimally a prosodic word. At the same time, 2PCs in languages such as Serbo-Croatian and Warlpiri can occur following a syntactic constituent larger than a prosodic word, showing sensitivity to syntactic structure not expected if the placement is purely phonological; syntactic factors also determine which constituent, whether syntactically or prosodically defined, is most local to the clitics and will serve as their host. Analysis of 2PCs, therefore, involves determining the relative involvement of syntactic and phonological factors in clitic placement, which in turn has implications for the relationship between the syntactic and phonological components of the grammar.

In this thesis, I propose that the position of 2PCs relative to their host in SENĆOTEN is derived during mapping from syntactic to prosodic structure, through constraints governing the prosodic derivation. This offers a different perspective than many previous accounts. For instance, Serbo-Croatian clitic placement has been argued to occur only by syntactic mechanisms (e.g. Progovac, 1996; Bošković, 2001), only by prosodic mechanisms (e.g. Radanović-Kocić, 1996), or by a combination of syntactic and prosodic mechanisms (e.g. Halpern, 1992; Schütze, 1994; Werle, 2009).<sup>5</sup> With the exception of Werle (2009), however, accounts that involve the phonological component treat 2PCs as an isolated phenomenon and propose phonological operations specifically to account for their placement. For instance, Radanović-Kocić (1996) proposes that 2PCs are indexed with a [+clitic] feature and that all items indexed with a [+clitic] feature move into second position. Halpern (1992) argues that 2PC placement in Serbo-Croatian is primarily syntactic, but may occur in the phonology as a last resort. He proposes Prosodic Inversion (PI) as the mechanism that inverts clitics with the closest available prosodic word in cases where the syntax fails to provide the clitics with a host. In contrast, I propose an account where clitic placement involves mechanisms that are independently required in mapping between syntax and prosody.

This approach is closest to that of Werle (2009), but also bears some resemblance to Revithiadou (2006). Werle (2009) accounts for 2PC placement with alignment constraints in Serbo-Croatian, proposing that prosodic 2PC placement involves the predicate raising at the syntax-phonology interface in order align a prosodic word with the left edge of the initial prosodic phrase of the clause; this derives 2PC placement

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<sup>5</sup> The literature on Warlpiri is similarly divided (cf. Hale, 1973; Laughren, 1989 for phonological accounts, and Legate, 2008 for a primarily syntactic account.)

without stipulating that each 2PC is lexically subcategorized for a host to its left. My analysis of SENĆOFEN 2PCs differs from Werle 2009 primarily in proposing that 2PC placement occurs as a result of an interaction between linearization and prosodic phrasing during the derivation of prosodic structure, rather than by PF movement at the syntax-phonology interface.

Revithiadou (2006) also accounts for 2PC placement in terms of alignment constraints in certain dialects of Greek. She proposes that 2PCs move from a postverbal position to a preverbal position in the syntax. Alignment constraints determine which copy in the movement chain is pronounced; if there is a suitable host preceding the higher copy (and the verb) the higher copy is pronounced, otherwise the lower copy is pronounced. Though similar in relying on prosodic constraints that have independent plausibility within the theory of prosody, Revithiadou's approach cannot account for clitic placement in SENĆOFEN, since many of the clitics are base-generated high in the clause and do not undergo syntactic movement. My analysis differs from Werle (2009) and Revithiadou (2006) in proposing the same set of prosodic constraints for the parsing of 2PCs and other function words, but follows both Werle and Revithiadou in deriving 2PC placement without positing subcategorization features on the individual clitics.

## **1.2 Theoretical framework**

Throughout this thesis, I will assume a Minimalist framework, following Chomsky (2000, 2001). I will assume that the narrow syntax maps items from a lexical array to a representation compatible with the semantic interface, Logical Form (LF). Narrow syntactic structures are built bottom-up by the operation Merge, which combines two syntactic objects and projects one of them. This creates a hierarchical structure that is

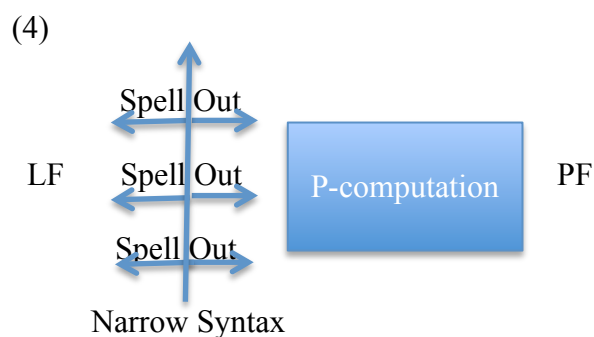
nonlinear. In addition to Merge, the narrow syntax allows the operation Move, where a syntactic object with a certain set of features, the *goal*, may be displaced in order to Merge with a higher syntactic object that has matching uninterpretable features, the *probe*; the uninterpretable features of the probe Agree with the interpretable features of the goal and delete. All uninterpretable features must delete before the syntactic structure reaches the semantic interface, or the derivation will crash.

I will further assume that syntactic structure is constructed in phases, which are closely related to the propositional structure of the clause. Chomsky (2001) specifically identifies CP and transitive vP as strong phases. Upon completion of a strong phase, the domain of the phase (the complement of the phase head, including all the nodes it dominates) is transferred to the phonological and semantic components of the grammar by the operation Spell-Out. This means that the phonological structure is constructed cyclically, with phonological operations occurring post-syntactically at regular intervals during the derivation.

Following López (2009), I propose that the construction of prosodic structure is derivational and occurs in the prosodic-computation component of the grammar (P-computation), following the operation Spell-Out. In P-computation, the construction of prosodic structure proceeds bottom-up, mirroring the syntactic computation. For López, each stage of structure building is evaluated by constraints governing the mapping between syntactic and prosodic structure. Essentially, these constraints act as a filter on the output of P-computation.

These assumptions give a model of the grammar like that schematized in (4). The narrow syntax proceeds with Spell Out occurring at regular intervals (at the completion

of each strong phase). Spell Out transfers the syntactic derivation to LF and the P-computation component of the grammar. P-computation constructs the prosodic structure of the Spell-Out domain of each phase. The output of P-computation is the set of ‘instructions’ for the sensorimotor systems at the PF (phonetic form) interface.<sup>6</sup>

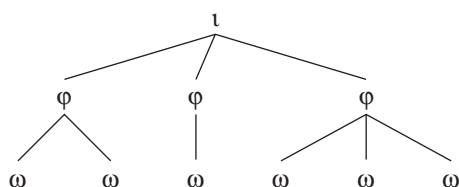


I adopt Match Theory (Selkirk, 2009, 2011) to account for the mapping from syntax to prosody. Under Match Theory, a set of universal correspondence constraints maps syntactic constituents to prosodic constituents, though pressures from prosodic markedness constraints may obscure these correspondences. Structure built under Match Theory will have prosodic phrases dominating prosodic phrases, just as phrasal nodes (XPs) dominate phrasal nodes in the syntax. This means that Match Theory is a marked departure from earlier conceptualizations of prosodic structure which postulate the *strict layer hypothesis* (e.g. Selkirk, 1986, 1995; Nespor and Vogel, 1986; Pierrehumbert and Beckman, 1988). Under the strict layer hypothesis, a prosodic category dominates only a prosodic category immediately below it in the prosodic hierarchy. This means that a prosodic phrase should dominate only prosodic words, while only an intonational phrase

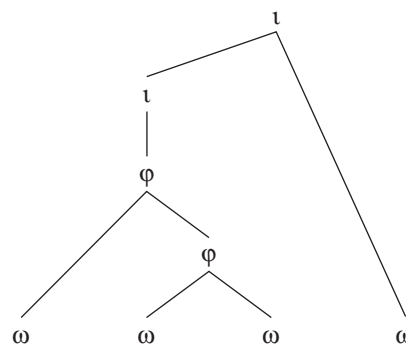
<sup>6</sup> I assume that morphological operations also occur post-Spell-Out, so that they occur in the same component of the grammar as the prosodic computation. This could mean that the prosodic structure and the phonological structure of words are built during the same derivation (in the same way that morphological and syntactic structure are constructed during the same derivation in Distributed Morphology (e.g. Halle & Marantz, 1993)); however, the exact relationship between the morphological and prosodic components of the grammar is a matter for future research.

should dominate a prosodic phrase. This results in a prosodic structure like that in (5a) (from Selkirk, 2011:437). In contrast, Match Theory allows recursive phrasing and level skipping, so that both (5a) and (5b) are possible prosodic structures (Selkirk, 2011:438).

(5) a.



b.



### 1.3 Linearization and prosodic phrasing

Following López (2009) and Elfner (2012), I assume that linearization takes place post-syntactically in the P-computation component of the grammar. Linearization is evaluated by a constraint, LINCORR. LINCORR is a violable constraint, ranked with respect to other constraints governing the mapping between syntax and prosody. I adopt the definition of LINCORR in Elfner 2012:240:

- (6) LINEARCORRESPONDENCE(LINCORR): Assign one violation mark for every syntactic node  $\alpha$  whose terminal nodes do not precede the set of terminal nodes dominated by a syntactic node  $\beta$  which  $\alpha$  asymmetrically c-commands.

Linearization takes place alongside prosodic phrasing. Following Elfner (2012), I adopt the constraint MATCH-PHRASE to account for the mapping between syntactic and prosodic structure under Match Theory. MATCH-PHRASE is satisfied when syntactic XPs map to prosodic phrases ( $\phi$ ), preserving the syntactic structure in the prosodic representation. I also adopt the definition of MATCH-PHRASE given in Elfner (2012):

- (7) MATCH-PHRASE (Elfner, 2012:28)

Suppose there is a syntactic phrase (XP) in the syntactic representation that exhaustively dominates a set of one or more terminal nodes  $\alpha$ . Assign one violation mark if there is no phonological phrase ( $\varphi$ ) in the phonological representation that exhaustively dominates all and only the phonological exponents of the terminal nodes in  $\alpha$ .

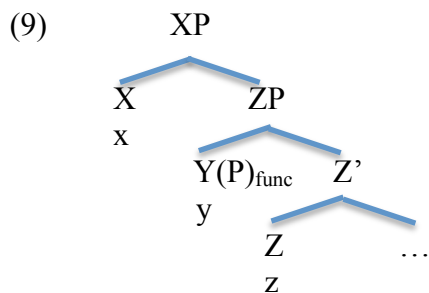
The final constraint that will play an important role in this thesis is a phonological markedness constraint STRONG-START (Selkirk, 2011; Elfner, 2012). STRONG-START disprefers prosodic structures where the prosodic constituent at the left of a prosodic category is lower in the prosodic hierarchy than its sister. I also adopt Elfner's (2012:157) definition of STRONG-START:

- (8) STRONG-START: Assign one violation mark for every prosodic constituent whose leftmost daughter constituent is lower in the Prosodic Hierarchy than its sister constituent immediately to its right:  $*(\kappa_n \kappa_{n+1} \dots)$  (after Selkirk, 2011)

Following López (2009), I propose that these constraints evaluate each stage of the derivation of prosodic structure. This is a departure from Elfner 2012, in which constraints evaluate the prosodic structure of a Spell-Out domain as a whole, rather than evaluating the prosodic derivation step-by-step. I adopt a step-by-step approach in order to be as explicit as possible about the logic behind particular prosodic structures and how they relate to the syntactic derivation. A more global evaluation, while possible, is complicated by the fact that the input syntactic structure and output prosodic structure are hierarchical, multiplying the possible number of candidates and interactions between constraints needed to determine the winning candidate.

In SENĆOFEN, MATCH-PHRASE and STRONG-START are equally ranked, but STRONG-START is ranked above LINCORR: MATCH-PHRASE, STRONG-START  $\gg$  LINCORR. This means that a structure may violate LINCORR in order to avoid a STRONG-START violation, but only when this alternate linearization does not also violate MATCH-PHRASE. In my

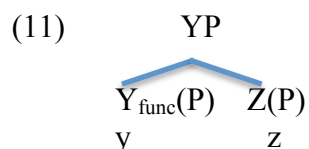
analysis, this is possible with function words that do not project a branching node, but are rather syntactic X(P)s. Since they do not project a branching node in the syntax, I propose that they also do not project a prosodic phrase in the prosodic derivation. Since they do not themselves project a prosodic phrase, they have the option of remaining unparsed at a particular step of the derivation without violating MATCH-PHRASE; this occurs where it allows the parsing of these function words to avoid violating STRONG-START. For instance, take (9) to be the Spell-Out domain of a STRONG-PHASE. First, the most embedded element, the prosodic word *z*, enters the prosodic derivation (10a). Next the function word  $y_{\text{func}}$  enters the derivation. Since forming a prosodic phrase with *z* would violate STRONG-START, *y* remains unparsed; this does not violate MATCH-PHRASE. When *x* is added to the structure,  $y_{\text{func}}$  will phrase with *x*, giving the prosodic structure in (10c).



(10) a.  $(\omega z)$                       b.  $y_{\text{func}} (\omega z)$                       c.  $(\varphi (\omega x) y_{\text{func}}) (\omega z)$

At the edge of the Spell-Out domain of the phase, the fact that these function words do not project a prosodic phrase means that they can parse in a way that incurs a linearization violation without simultaneously violating MATCH-PHRASE. For instance, take (11) to be the Spell-Out domain of a phase. The most embedded element *z* enters the prosodic derivation and maps to a prosodic phrase (12a). When  $y_{\text{func}}$  is added, it remains unparsed to avoid violating STRONG-START (12b). However, there is no further material to be added and  $y_{\text{func}}$  cannot remain unparsed when the Spell-Out domain is complete.

Rather than violate STRONG-START, the derivation will violate LINCORR, allowing the function word to phrase as an enclitic (12c).



- (12) a. ( $\varphi$  ( $\omega$  z))    b.  $y_{\text{func}}$  ( $\varphi$  ( $\omega$  z))    c. ( $\varphi$  ( $\omega$  z)  $y_{\text{func}}$ )

With regards to (10) and (12), I assume that a prosodic constituent cannot be simply added to the right of the derivation in order to satisfy STRONG-START. New units entering the derivation are always added to the left, creating a left-branching prosodic derivation that mirrors syntactic structure.<sup>7</sup> A linearization violation involves the newly added unit ‘tucking in’ to the prosodic derivation, disrupting existing prosodic structure; this is the reason that linearization violations are only possible where the newly added unit is prosodically deficient. This basic framework derives linearization violations in the parsing of 2PCs in my analysis. The details of individual structures will be taken up in chapter 3.

This approach is novel both in applying Match-Theory within a derivational model of prosodic structure building and in applying Match-Theory in analyzing 2PCs. Elfner (2012) proposes a similar interaction between prosodic phrasing and linearization within MATCH-THEORY to account for pronoun post-posing in Connemara Irish, but her analysis is not framed in a derivational model. As far as I am aware, this is the first analysis of 2PCs framed within Match-Theory.

<sup>7</sup> I am assuming that this follows from the properties of the derivational model, but this could also be handled under some form of constraint conjunction, where a derivation cannot simultaneously violate LINCORR and some constraint against right-headed structure.

### **1.4 Predictions**

The analysis presented in this thesis makes several immediate predictions. First of all, prosodically motivated 2PC placement should only occur in languages where STRONG-START is ranked above LINCORR. Secondly, parsing of 2PCs should not be evaluated as an isolated phenomenon, but rather parsing of 2PCs should be consistent with the prosodic phrasing otherwise found in the language, since it is governed by the same constraints. Thirdly, linearization violations should primarily target function words, which are deficient in terms of prosodic structure. Fourthly, unexpected linearizations resulting from the interaction of constraints during the building of prosodic structure should occur primarily at phase edges. The analysis therefore predicts interactions between prosodic phrasing and linearization also at the edge of the *vP* phase. In chapter 4, I will discuss some likely candidates. Finally, adopting a framework where mapping of syntax to prosody is evaluated by ranked constraints predicts a typology of language behaviour, based on different possible constraint rankings. Whether there are in fact languages that exhibit the properties predicted by different rankings of these constraints is a matter for future research, but I sketch some of the predictions in chapter 4.

### **1.5 Language background**

SENĆOFEN is a dialect of Northern Straits Salish, which, together with the closely related language Klallam, forms the Straits Salish subgrouping of the Central Salish branch of the Salish language family. Table 1 shows the language subgroupings for reference (adapted from Czaykowska-Higgins & Kinkade, 1998, Table 1, p.3; Kroeber, 1999, Table 1.1, p. 4).

**Table 1. *The Salish language family.***

Coast Salish	Interior Salish
Tillamook	Northern
Central Salish	Lillooet
Comox	Thompson
Pentlatch	Shuswap
Sechelt	Southern
Squamish	Columbian
Halkomelem	Okanagan-Colville
Nooksack	Kalispel-Spokane
Straits	Coeur d'Alene
Northern Straits	Tsamosan
Klallam	Inland
Lushootseed	Upper Chehalis
Twana	Cowlitz
	Maritime
	Quinault
	Lower Chehalis

Straits Salish was traditionally spoken on Vancouver Island and the Gulf Islands of British Columbia, and on the San Juan Islands and Olympic Peninsula of Washington State, as well as along the mainland coast from White Rock in British Columbia to Bellingham in Washington State (Czaykowska-Higgins & Leonard, 2015).

**Figure 1. Map of Northern Straits Salish (IAIG 2000).**

Northern Straits has six mutually intelligible dialects, known as SENĆOFEN (Saanich), T'Sou-ke (Sooke), Lekwungen (Songish), Malchosen (Samish), SEMIYOME (Semiahmoo), and Xwlemichosen (Lummi). SENĆOFEN is the language traditionally spoken by the W̱SÁNEĆ people, whose traditional territory includes the W̱JOLELP (Tsartlip), STÁ,UTW (Tsawout), BOKÉCEN (Pauquachin) and W̱SÍKEM (Tseycum) reserves of the Saanich Peninsula of Vancouver Island. The 2014 Report on the Status of B.C. Languages documents 7 fluent speakers and 103 semi-speakers of Northern Straits. In the W̱SÁNEĆ community, there is an active group of adult language learners, as well as initiatives for teaching children, including an immersion preschool, immersion kindergarten and grade 1 classes, as well as language classes at the ŁÁU,WELNEW Tribal School for children in higher grades.

Developing relationships within the W̱SÁNEĆ community has made me aware of the importance of the language as a vehicle of culture and identity, and consequently the importance of teaching SENĆOFEN to future generations. Within this context, I felt that studying the language could not be solely a matter of academic interest, but should also contribute to the study of the language by teachers and learners in the community. For this reason, I decided to include a teaching resource as part of this project, identifying generalizations and descriptions from the linguistic analysis that would be useful to learners and teachers. In order to frame the linguistic descriptions in a way that would be accessible, I needed help from a language teacher, which led to the productive collaboration with STOLÇEŁ Elliott that produced the teaching appendices. The teaching resource represent an important aspect of the thesis, since its development involved

moving away from a research model where research contributes primarily to the academic world, towards a model of research that benefits both the linguist and the community and is undertaken collaboratively in partnership with community members (Czaykowska-Higgins, 2009).

### **1.6 Resources, methodology and glossing**

For this study, I examined three texts previously transcribed, translated and glossed:

1. ‘Raven abandons his son’ (Montler, 1986:242-257)
2. ‘Dr. Sam’s Flood Telling’ (Cienski, 2010:83-101)
3. An unpublished story told by the late WŚÁNEĆ elder Philip Pelkey, translated and transcribed by Dr. Timothy Montler (Montler, forthcoming b).<sup>8</sup>

Altogether, the stories contain about 350 sentences. Other sources of data include examples from Montler 1986, examples from Turner’s (2011) electronic database, which contains data collected during fieldwork for her Master’s thesis and doctoral dissertation, and examples in an unpublished dictionary of SENĆOFEN (Montler, forthcoming a).

During later stages of this research, I also had the privilege working with two WŚÁNEĆ elders, Lou and Belinda Claxton; my sessions with these two elders had a large impact on my understanding of the grammar and prosody, an influence that impacts all aspects of this thesis, even where the cited data is not from my own fieldwork. Also, though I did not have a chance to work with her directly, I learned a lot from late Anne Jimmy, to whom this thesis is dedicated, through listening to her participate in linguistic field sessions conducted by other linguists.

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<sup>8</sup> Examples from this story are given with a numeral, indicating their place in the story (e.g. [P.27.26.1]).

In the initial stages of studying the 2PCs, I created a database in Microsoft Excel of sentences with second-position clitics from the three stories, in order to compare clitic behaviour across clauses. Data from the three stories provided over 130 clauses with second position clitics. Sorting these clauses uncovered generalizations concerning the clitics' distribution, which guided further investigation.

Throughout this thesis, I have presented many of the examples in five lines, as shown in (13).

- (13) D E M T L T E                      (Montler, 1986:114)  
 t̥əmt=łtə  
 √t̥m<?>-ət=łtə  
 √hit<NACT>-TR=1PL.SBJ  
 'We're hitting it.'

The top line of each SENĆOŦEN example is written in the SENĆOŦEN orthography, developed by the late WSÁNEĆ elder, David Elliott, Sr. The representation of the examples in the SENĆOŦEN orthography is my own work, and subject to error. Examples from other dialects of Northern Straits are not given in the SENĆOŦEN orthography, since speakers of these dialects do not use this orthography. The second line of the examples gives the corresponding American Phonetic Alphabet (APA) transcription, traditionally employed in Salish linguistics literature. The third line is also in the American Phonetic Alphabet, but breaks the words into component morphemes, so that morphemes obscured by the operation of phonological processes in the surface representation (given in the second line) are easily identifiable in the third line. The root symbol is used to indicate morphemes that can function predicatively or take affixes to function predicatively. Where the second and third lines would be essentially identical, the second line is omitted. The fourth line gives an English gloss, corresponding to the

morphological breakdown in the third row.<sup>9</sup> Finally, the fifth line gives an English translation of the example. The transcriptions, morphological breakdown, glossing and translation of the examples are generally taken from Timothy Montler's work and represent his current analysis and understanding of the language.

The SENĆOTEN orthographic symbols are charted alongside the APA symbols in tables 2 and 3 (adapted from Leonard, 2007:4-5). The system is notable for its contrasting plain and ejective stops, and velar and uvular place of articulation. In the orthography, the glottal stop is only represented in coda position and appears following the orthographic symbol of a resonant in the case of glottalized resonants.

**Table 2. Consonants in the SENĆOTEN orthography and the corresponding APA symbols.**

	Labial	Coronal				Dorsal			Glottal
	bilabial	dental	alveolar	lateral	post-alveolar	velar	uvular		glottal
<b>Obstruents</b>	p P		t T		č Č	k <sup>w</sup> Ć	q Ķ	q <sup>w</sup> Ķ̣	
	ᵀ B	t̥ Ƨ	ṭ D	ɬ Ƨ̣	č̣ J	ḳ <sup>w</sup> Q	q̣ K	q̣ <sup>w</sup> Ķ̣	? ,
		θ Ƨ̥	s S	ɬ̣ Ƨ̣̣	š Š	x <sup>w</sup> Ẉ	x̣ X	x̣ <sup>w</sup> X̣	h H
<b>Resonants</b>	m M		n N	l L	y Y	w W	ŋ Ṇ		
	ᵐ M,		ᵐ̣ N,	ᵐ̣̣ L,	ᵐ̣̣̣ Y,	ẉ W,	ŋ̣ Ṇ,		

<sup>9</sup> I have employed the Leipzig glossing conventions, where possible (Max Plank Institute, 2008).

**Table 3. Vowels in the *SENĆOFEN* orthography and the corresponding *IPA* symbols.**

	Front	Central	Back
<b>High</b>	i I		u U
<b>Mid</b>	e Á	(ə) (E)	
<b>Low</b>		a O	

There are three other vowel orthographic symbols, A [æ], a phonetic variation of Á, and two symbols that correspond to vowel-glide combinations: Å [ey] and Í [əy] (Leonard 2007:5).

### 1.7 The Pronominal Argument Hypothesis

Before concluding this introduction, I should clarify my position regarding the argument structure of Northern Straits (and Salish languages more generally) (see also Czaykowska-Higgins & Leonard, 2015 for an overview of this issue with respect to Northern Straits Salish). Jelinek (1984, 1996, 1998, 2006) and Jelinek and Demers (1982, 1994) propose that the Northern Straits dialect Lummi is nonconfigurational. They argue that overt full DPs are adjuncts, rather than arguments, in Salish languages; person inflections are the (pronominal) arguments of the clause. In their analysis, adjoined DPs are essentially appositive, rather than forming part of the integral structure, and coindexed with a pronominal argument. This theoretical proposal is known as the Pronominal Argument Hypothesis (PAH).

An important series of papers refuting the PAH for Salish languages were subsequently published. Investigating the Northern Interior Salish language St'at'imcets, Davis (2005a) and Davis and Matthewson (2003, 2009) provide robust evidence for

asymmetries between subject and object DPs, as well as between direct and oblique object DPs, showing that c-command relationships between overt full DP arguments exist. For example, (14) shows weak-crossover in St’at’imcets. In (14), either argument may be interpreted as the subject. However, if the possessed DP is interpreted as the subject, the possessive suffix cannot be co-indexed with the quantified lower argument (theme).

- (14)    wa7 xwey-s-twítas            i=kwekw7-i=ha                            tákem  
          IMPF dear-CAUS-3PL.ERG PL.DET=grandmother-3PL.POSS=EXIS all  
  
          i=sqáycw=a  
          PL.DET=man=EXIS
- (i) ‘All the men<sub>i</sub> love their<sub>i/j</sub> grandmothers.’  
 (ii) ‘Their<sub>\*i/j</sub> grandmothers love all the men<sub>i</sub>.’

Unfortunately, systematic testing of c-command relationships between DPs in Northern Straits has not been carried out. However, it seems unlikely (though not impossible) that Northern Straits would be completely structurally divergent from other Salish languages (Davis & Matthewson, 2009). Since overt DP arguments will not play a major role in this thesis, I will assume a configurational clause structure in this thesis, leaving further investigation of this matter for future research.

### 1.8 Overview of thesis

There are three remaining chapters in this thesis. Chapter 2 concerns the syntactic representation of SENĆOFEN 2PCs and their hosts, examining their meaning and grammatical function. Chapter 3 presents an analysis of 2PC placement in the P-computation module of the grammar, developing an analysis of the intonational patterns of SENĆOFEN and how the 2PCs fit within these patterns. Chapter 4 discusses the predictions of the analysis and concludes. The teaching appendices, found following

chapter 4, employ concepts from the preceding linguistic analysis in a way that is intended to be helpful for learners and teachers. Those who do not have a background in linguistics will find the analysis presented in chapters 2 and 3 of this thesis most useful for the SENĆOŦEN examples throughout and the descriptions of the use of 2PCs in Chapter 2.

Chapter 2 has two main parts. Section 2.1 gives an overview of the second-position clitics in SENĆOŦEN, in which I argue for a syntactic representation where the clitics occupy positions above other clausal material. This section contains examples for each of the 2PCs under discussion, as well as a description of their meaning and their position relative to other 2PCs. In section 2.2, I provide examples and descriptions to show how the initial prosodic word, or ‘full’ word, preceding the clitics 2PCs fits into the grammatical structure of a number of different types of sentences. In this section, I identify three different categories of clitic hosts, based on their morphosyntactic properties, and develop a tentative analysis of the clause structure with respect to their base positions.

The third chapter presents the main arguments of this thesis. In chapter 3, I discuss how the grammatical structure and intonation structure of sentences interact to put 2PCs following the initial prosodic word. I show that the distribution of SENĆOŦEN second-position clitics follows from constraints independently motivated in the mapping from syntactic to prosodic structure. In section 3.1, I introduce the mechanisms involved in the analysis and show how 2PC placement is derived. In section 3.2, I briefly examine evidence for prosodic word boundaries and prosodic phrasing in SENĆOŦEN, providing a brief description of SENĆOŦEN prosodic/intonational structure. In section 3.3, I apply

the analysis to structures with 2PCs proposed in chapter 2. Finally, in section 3.4, I argue that a prosodic account of 2PC placement in SENĆOFEN better fits the data than a syntactic account of 2PC placement.

Chapter 4 explores how the analysis developed here might account for certain prosodically motivated linearizations at the CP and  $\nu$ P phase edge in other languages. I examine pronoun post-posing in Connemara Irish in section 4.1 and auxiliary placement in Eastern Armenian in section 4.2. In section 4.3, I discuss a puzzle regarding constituency and linearization in Serbo-Croatian and Warlpiri. Finally, in section 4.4, I lay out the typology of language behaviour predicted by different rankings of the constraints employed in this analysis.

Finally, in the teaching appendices, STOLČEĽ Elliott and I took concepts from the linguistic analysis and used them to provide descriptions of the placement and meaning of the 2PCs, moving away from linguistic terminology to provide a resource that is more generally accessible. The concepts in the teaching resource are drawn especially from chapter 2 of the linguistic analysis, but also includes concepts drawn from chapter 3. In addition to descriptions of the 2PCs, the teaching resource includes a series of exercises to help with teaching and learning this material.



## Chapter 2

### SENĆOTEN second-position clitics and clause structure

This chapter provides an analysis of clause structure in SENĆOTEN, necessary background for the analysis of clitic placement in chapter 3. In this chapter, I argue that 2PCs in SENĆOTEN occupy syntactic positions above the syntactic position of their host, while their host is merged lower in the clause, contributing to the propositional content. Subject pronoun clitics begin within the verb phrase and raise to occupy spec-TP.<sup>10</sup> The other second-position clitics scope semantically over the ‘core’ propositional content of the clause (the predicate and its arguments, plus any predicate modifiers) and are merged in a series of hierarchically arranged positions at the left edge of the clause. Possible hosts include negation, a class of intensifying auxiliaries (IAs), and the main predicate of the clause, each exhibiting different morphosyntactic properties. Semantically, these belong to the propositional content of the clause and are merged in a series of syntactic positions below the second-position clitics.

Section 2.1 provides both an overview of the individual 2PCs and an analysis of their base syntactic positions. I follow Montler 1986 in grouping the clitics into syntactic positions based on their functions. Unlike previous syntactic analyses (Jelinek 1996, 2000), however, I do not treat all the clitics as heads in the clausal spine, but analyze some as adjuncts.

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<sup>10</sup> Subject clitics in transitive and unergative clauses are probably merged in Spec-VoiceP, since the morphology on the predicate likely indicates the presence of both *v* and Voice, with transitivity morphology in *v* and passive morphology in Voice. Since this is not important for my analysis, I abstract away from the VoiceP/*v*P distinction in this thesis. The Uniformity of Theta Assignment Hypothesis predicts that subject clitics in passive and unaccusative clauses to Merge in object position (Baker, 1988).

In section 2.2, I analyze the morphosyntactic properties and base syntactic positions of the 2PCs' hosts. I show that the clitics' hosts show diverse morphosyntactic properties and argue that they occupy a series of hierarchically arranged syntactic base positions below the 2PCs. The highest potential host in this hierarchy precedes the clitics in the surface linear ordering. This section also includes a discussion of other clitics (also known as particles) that appear in the structures under discussion.

### **2.1 An overview of SENĆOFEN 2PCs**

2PCs in SENĆOFEN are a varied class with more than sixteen documented members.

These clitics are ubiquitous and often occur in combination, although groupings of more than three are rare (and groupings of two are much more common than groupings of three). When they co-occur, the various clitics appear in a fixed order that appears to be related to their function in the clause. Based on the clitics' relative ordering and semantic contribution, Montler (1986) divides the clitics into groupings, corresponding to five positions in the clitic string. Czaykowska-Higgins and Leonard (2015:1732) provide the following table of SENĆOFEN 2PCs, based on the five positions proposed in Montler 1986:1:<sup>11</sup>

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<sup>11</sup> The SENĆOFEN orthography is my addition.

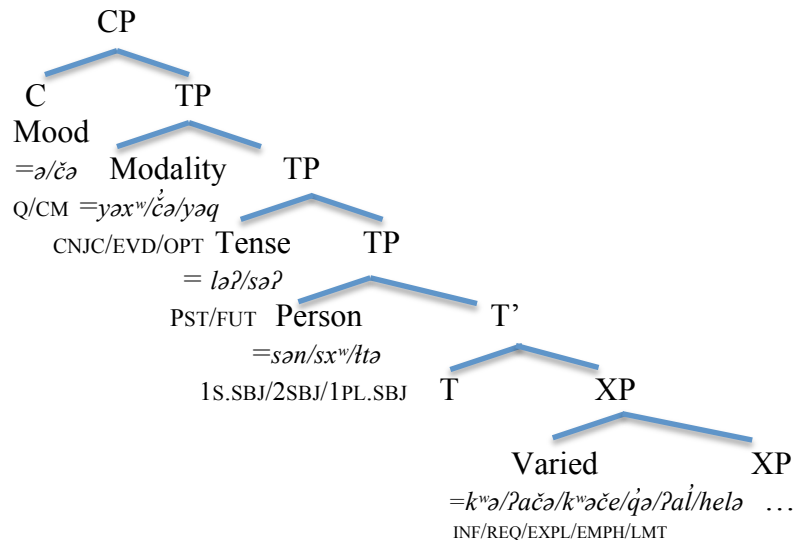
**Table 4. Second-position clitics in SENĆOŦEN.**

1. Mood		2. Modality		3. Tense		4. Person		5. Varied	
E	‘yes/no Q’	JE	‘evidential’	LE	‘past’	SEN	‘1S.SBJ’	KE	‘emphatic’
ə		čə?		lə?		sən		qə?	
ĆE	‘command’	YEK	‘optative’	SE	‘future’	SW	‘2S.SBJ’	ČE	‘informative’
čə		yəq		sə?		sx <sup>w</sup>		k <sup>w</sup> ə?	
		YEW	‘conjunctural’			ŁTE	‘1PL.SBJ’	ČEĆA	‘explanative’
		yəx <sup>w</sup>				łtə		k <sup>w</sup> əče	
								OĆE	‘request info.’
								ʔače	
								HÁLE	‘2 <sup>nd</sup>
								helə	pluralizer’
								OL,	‘limiting’
								ʔal	

Besides the sixteen clitics in Table 1, there are other 2PCs, less frequently attested, including *ĆTE/čtə* ‘probable’, *WE,OĆE/wəʔačə* ‘presumptive’, *ČEE/čət* ‘encourage’ and *K/q* ‘conditional’; they do not appear in the table because their position relative to the other clitics has not been fully determined.

In what follows, I will propose syntactic positions for each of the clitics, based on their distribution and semantic function. I will argue that the position 1 clitics occupy C, while the position 2 and position 3 clitics are both adjuncts to TP. The subject clitics occupy spec-TP, moved from within the *v*P. The position 5 clitics are adjoined to the highest projection associated with the verb phrase (belonging to the predicative content of the clause). The syntactic positions corresponding to the columns in table 4 are illustrated in (1).

(1)



### 2.1.1 Position 1: Mood clitics

Position 1 2PCs are clause-typing morphemes.  $E/ə$  marks the utterance as a yes/no question.  $ČE/čə$  marks the clause as a command and seems to be sensitive to the forcefulness of the speech act; requests do not use  $ČE/čə$ . Matrix clause declaratives are not marked with a position 1 clitic.

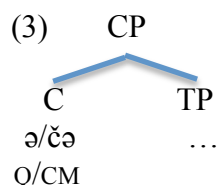
(2) a. YÁ, E LE, SW  
 yéʔ=ə=ləʔ=sxʷ  
 √go=Q=PST=2SBJ  
 ‘Did you go?’

(Montler, 1986:2-3)

b. YÁ, ČE  
 yéʔ=čə  
 √go=CM  
 ‘Go away!’

Position 1 clitics occur in complementary distribution with each other (they do not co-occur) and the subordinating complementizer  $C/kʷ$ ; neither the yes/no question marker

*E/ə* or the command marker *ČE/čə* occur in subordinate clauses. I propose that these clitics occupy C in matrix clauses (3).<sup>12</sup>



### 2.1.2 Position 2: Modality clitics

According to Montler (1986), position 2 clitics can be characterized as markers of modality. Two of the position 2 clitics express the speaker's degree of commitment towards the propositional content of the clause. *JE/čə* indicates that the speaker is inferring the propositional content based on available evidence (often from an unspecified third person) (Montler, 1986).<sup>13</sup>

- (4) ENÁ **JE** (Montler, 1986:4)  
 ?ən?é=**čə**  
 √come=**EVD**  
 'He'll come (I hear he's coming).'

*YEW/yəx<sup>w</sup>* indicates that the propositional content of the clause is not asserted by the speaker, but is rather a conjecture (Montler, 1986). *YEW/yəx<sup>w</sup>* can occur with the yes/no question clitic *E/ə* (5b).<sup>14</sup>

<sup>12</sup> Timothy Montler (personal communication) points out that the yes/no question clitic can come as a tag at the end of a clause, as in (i):

(i) NĪ LE EN, ŠXEN, ÁN, E (Timothy Montler, personal communication)  
 níł lə? ?ən-š-√xən?éŋ, ə?  
 3.focus=PST 2POSS-NMLZ-√way-MD=Q  
 'That's how you were, eh?'

<sup>13</sup> STOLČEĚ Elliott (personal communication) informs me that *JE/čə* is used when the speaker is confident about the truth or outcome. That is, the speaker has the proposition from a third person or is inferring based on the available evidence (e.g. using wind direction to predict weather), but is reasonably certain that the proposition will come about/is true.

<sup>14</sup> I have not found examples of *JE/čə* co-occurring with the position 1 clitics, but it shares distributional and semantic properties with *YEW/yəx<sup>w</sup>*, so I will continue to refer to these as belonging to the same subclass of 2PC.

- (5) a. NIŁ **YEW**      ĆTE      NE TÁN      (Montler, 1986:8)  
 níł=**yəx**<sup>w</sup>      k<sup>w</sup>θə      nə-tén  
 √3focus=CNJC INV.F.DET 1POSS-√mother  
 ‘It must be my mother.’

- b. YÁ, E **YEW** SE,?      (Montler, forthcoming a:379)  
 √yéʔ=ə=**yəx**<sup>w</sup>=səʔ  
 √go=Q=CNJC=FUT  
 ‘I wonder if he's going?’

Unlike position 1 clitics, *JE/ćə* and *YEW/yəx<sup>w</sup>* can co-occur, which indicates that they do not occupy the same syntactic head.

- (6) TES-S      I, ĆŁ U,      NIŁ **JE YEW**      EW, SṬLÁLEKEM TṬÁ,E.  
 tás-s      ʔiʔ k<sup>w</sup>ł- uʔ-      níł=**ćə**=**yəx**<sup>w</sup>      eṵ      sḷéləqəm      tθéʔə.  
 √təs      ʔiʔ k<sup>w</sup>ł- əṵ-      níł=**ćə**=**yəx**<sup>w</sup>      əṵ      s-ḷeləqəm      tθeʔə  
 arrive.there CNJ PRF CONTR 3focus=**EVD**=CNJC CONN NMLZ-monster DET  
 ‘He got there and it must have been as a monster.’  
 [P.27.10.1]<sup>15</sup> (Montler, forthcoming b)

This suggests that *JE/ćə* and *YEW/yəx<sup>w</sup>* are either adjuncts or occupy a series of functional heads below C. Functional heads generally have an obligatory grammatical function, so that the grammatical properties of the clause or even the grammaticality of the clause is altered by their presence or absence. If *JE/ćə* and *YEW/yəx<sup>w</sup>* occupied functional heads at the left periphery of the clause, they might be expected to show evidence of affecting the grammatical properties (or grammaticality) of the clause. This is not the case. Instead, these clitics express the speaker’s epistemic attitude towards to the propositional content of the clause and do not appear to affect the clause’s grammatical properties; with this function, they could be modifiers scoping over the propositional content of the clause. In this, they contrast with the yes/no question clitic, which is required to form yes/no questions and changes the clause type, and the command clitic, which also has a clause-typing function.

<sup>15</sup> The ID numbers on sentences refer to notebook, page, and item in Timothy Montler’s notes.

The position 2 modal clitics also have relative freedom of distribution, which allows them to take scope within nominalized clauses and DPs (as well as co-occur), favoring an adjunct analysis. In (7), *JE/čə* occurs following the main predicate *NIE/níł* of a subordinate nominalized clause; the subordinate clause is introduced by the subordinating complementizer *Č/k<sup>w</sup>* and the nominalizer *S/s*.<sup>16</sup>

(7) I, BČESET	[ <sub>CP</sub> EN,Á ČS	NIEs JE	TFE SQÍET
ʔiʔ p̣k <sup>w</sup> ásət	[ <sub>CP</sub> ʔənʔé k <sup>w</sup> =s-	níł=s=čə	tθə sk <sup>w</sup> áyəθ
ʔiʔ √p̣ək <sup>w</sup> -sat	√ʔənʔe k <sup>w</sup> =s-	√níł=s=čə	tθə s√k <sup>w</sup> áyəθ
CNJ √float-REFL	√come SUB=NMLZ-√3.focus=3POSS=EVD	DET	S-√slave
EŁTÁLNEW KSETEN] <sup>17</sup>			
ʔəłtéləŋəx <sup>w</sup>	qsətəŋ]		
√ʔəłt-el-ŋix <sup>w</sup>	√qəs-ət-əŋ		
√person-ext-being	√immerse-TR-PASS		
‘But it came to the surface when it was a human slave that was thrown in.’			
[P.27.66.4]	(Montler, forthcoming b)		

In (8), *YEW/yəx<sup>w</sup>* and the past tense clitic *LE,/ləʔ* occur within the bracketed DP ‘the people of long ago’, which is introduced by the masculine determiner *TFE/tθə*.<sup>18</sup>

(8) NIE	ČS	XÁ,YOSTENs	E TFE NI,	E TFE
níł	k <sup>w</sup> =s-	xeʔyástəŋ=s	ʔə tθə níʔ	ʔə tθə
√níł	k <sup>w</sup> =s-	√xeʔy-as-t-əŋ=s	ʔə tθə √níʔ	ʔə tθə
√3.focus	SUB=NMLZ-	√argue-RECP-TR-PASS-3POSS	OBL DET	√exist OBL DET

<sup>16</sup> Montler (forthcoming b) represents the nominalizer *s* as a prefix. My representation of the nominalizer as an enclitic joined with the subordinating complementizer is intended to reflect its phonological distribution (also captured in the orthography).

<sup>17</sup> The third person possessive morpheme is represented as a lower case *s* in the SENĆOFEN orthography to distinguish it from other *s* morphemes, such as the nominalizer, in the language.

<sup>18</sup> *k<sup>w</sup>-hiθ* seems to have lexicalized as a single item (Timothy Montler, personal communication), so the presence of the realized prefix here is not an indication that *hiθ* is functioning as the predicate of a relative clause modifying the noun *ʔəłtéləŋəx<sup>w</sup>*. Moreover, the DP bracketed in (8) does not conform to the relative clause pattern found in SENĆOFEN, since relative clauses are structured with the head noun preceding the attributive clause (Montler, 1993), whereas in (8) the attributive lexical item precedes the head noun.

SWIW,LES E [DP TFE ØL HIF YEW LE, EŁTÁLNEW]  
 swáwłəs ʔə tθə kʷhiθ=yəxʷ=ləʔ ʔəltéłəxʷ  
 s-√wiwłəs ʔə tθə kʷt-√hiθ=yəxʷ=ləʔ √ʔəlt-el-ŋixʷ  
 s-√boy OBL DET PRF-√long.time=CJNC=PST √person-ext-being  
 ‘It was when he was argued with by some young man of the people of long ago.’  
 [P.27.78.2] (Montler, forthcoming b)

There is also the occasional example where the evidential clitic *JE/čə* occurs later in the clause than might be expected, perhaps for reasons related to semantic scope. For instance, *HO/haʔ* functions as a predicate and can host 2PCs (9a). In (9b), however, the evidential *JE/čə* is enclitic on the following subordinated nominalized predicate, which also belongs to the first conjunct.<sup>19</sup>

(9) a. HO, JE EN,Á ŠÁM, TES TFEW,NIL (Montler, forthcoming b)  
 háʔ=čə néʔ šém təs tθəwńit  
 √haʔ=čə √ʔənʔe √šem √təs tθəw-√nit  
 √if/when=EVD √come √dry.up √arrive the-√one  
 ‘When the tide went out, they arrived.’ [P.27.54.1]

b. HO, SU, KES JE TFA,ENEN SIYOSEN,s  
 háʔ suʔ-qəs-s=čə tθéʔənəŋ siyásəŋs  
 √haʔ s-w-√qəs-s=čə tθeʔə-nəŋ s-yə-√yas-əŋ<ʔ>-s  
 when S-CONTR-immersed=EVD that-thing s-NACT~√play-MD<NACT>-3POSS

U, KSESETs TFE NO,TE, SWIW,LES  
 ʔuʔ qsəsəts tθə náʔtʰə swíwłəs  
 ʔəw-√qs-sat=s tθə √nə<aʔ>tʰəʔ s√wiwłəs  
 CONTR-√immerse-REFL=3POSS DET √one<person> s√boy  
 ‘When their ball went into the water, one young man went into the water.’  
 [P.27.62.2] (Montler, forthcoming b)

In light of their distributional properties, I propose that these two clitics are modifiers, adjoined to *nP* in DPs and to TP in clauses. This avoids positing a Modal head (or heads) that can occur within DPs and also has favorable consequences for the analysis of subject clitics, as will be discussed below.

<sup>19</sup> Thanks to Timothy Montler (personal communication) for helpful discussion of these coordinate conditional sentences.

The final clitic listed in position 2, *YEK/yəq*, indicates that the propositional content of the clause is something wished for or hoped for by the speaker (Montler, 1986). This is shown in (10a), which is translated with a first person subject, though the subject in *SENĆOFEN* is the second-person pronoun *SW/sx<sup>w</sup>*. When it co-occurs with the past tense clitic *LE/lə?*, it can also receive the translation ‘I ought’ in certain contexts.

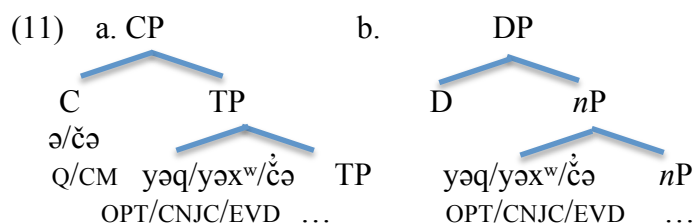
(10) a. *ĽÁU, YEK SW* (Montler, 1986:6-7)

√*łw=yəq=sx<sup>w</sup>*  
 √*heal=OPT=2SBJ*  
 ‘I hope you get better.’

b. *YÁ, YEK LE SEN*

√*yé?=yəq=lə?=sən*  
 √*go=OPT=PST=1S.SBJ*  
 ‘I ought to go/I wish I’d gone.’

This clitic is less frequent, and I have not found any examples where it co-occurs with the position 1 clitics or with other position 2 clitics (it could be that these clitics cannot co-occur for semantic reasons). I also have not found examples where *YEK/yəq* appears in subordinate clauses or DPs. For now, I will assume that it behaves as the other two position 2 clitics, leaving a more complete analysis of this clitic to future research. This gives the following schematized structures for position 2 clitics in clauses and DPs.



### 2.1.3 Position 3: Tense clitics

Position 3 hosts clitics that contribute to the temporal interpretation of the clause. For instance, *LE/ləʔ* gives a past tense reading to the question in (2a). In (12), *SE/səʔ* gives the clause a future tense interpretation.<sup>20</sup>

- (12) ŁÁAL=ŁTE=SE (Montler, 1986:212)  
 léel=łtə=səʔ  
 √go.ashore=1PL.SBJ=FUT  
 ‘We’ll get to shore.’

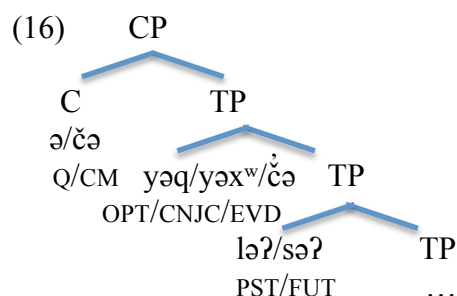
However, these tense clitics are not obligatory. For instance, a clause can often be interpreted in the past without *LE/ləʔ* and clauses, more rarely, also receive a future interpretation without *SE/səʔ* (Turner, 2015; cf. Matthewson, 2006 on St’at’imcets).

- (13) DÍLEM ʔE Janet (Turner, 2015:2)  
 tíləm θə Janet  
 sing DET.F Janet  
 ‘Janet sang; Janet is singing; Janet is going to sing; Janet sings; Sing, Janet.’

Turner (2015) and Matthewson (2006) argue that T is present, but phonologically null in SENĆOFEN and St’at’imcets, respectively. In these analyses, the tense clitics are not tense morphemes, but rather adverbial modifiers that affect the temporal interpretation of the clause. The distribution of the tense clitics supports this argument. Tense clitics may appear as modifiers within DPs, as shown in (8) and (14), which suggests that they are not canonical tense morphemes.

<sup>20</sup> The first person plural subject clitic precedes the future tense clitic in (12). Both the singular and plural first person subject clitics precede the tense clitics (Montler, 1986), while the second person subject clitic always follows the tense clitics.





#### 2.1.4 Position 4: Subject clitics

Position 4 is occupied by matrix clause subject clitics: *SEN/sən*, the first person singular subject clitic (e.g. (9b)), *ETE/ıtə*, the first person plural subject clitic (e.g. (10)), and *SW/sxʷ*, the second person subject clitic (e.g. (9a)). Third person subjects are null in intransitive main clauses and marked by the ergative agreement suffix *-ES/-əs*, which appears on the predicate, in transitive main clauses. The matrix clause subject clitics are shown in Table 5 (based on Montler, 1986:152).

**Table 5. Subject clitics in *SENĆOFEN***

	Singular	Plural
1 <sup>st</sup> person	SEN/=sən	ETE=ıtə
2 <sup>nd</sup> person	SW/=sxʷ	SW=sxʷ
3 <sup>rd</sup> person	∅	∅

Subordinate clause subject pronouns also appear to belong to the second-position clitic string; following Davis (1999), I argue that possessive and conjunctive subject markers are clitics, rather than affixes, based on their distribution. The possessive subject clitics are shown in table 6. The possessive subject clitics are homophonous with the possessive affixes that occur on nouns, though their distribution differs.

**Table 6. Possessive subject markers in SENĆOTEN**

	Singular	Plural
1 <sup>st</sup> person	NE/nə=	ŁTE/=łtə
2 <sup>nd</sup> person	EN,/ʔəñ=	EN,/ʔəñ=
3 <sup>rd</sup> person	s/=s	s/=s

Like main clause subject clitics, possessive subject markers can follow initial prosodic words with varied morphosyntactic properties. For example, (17a) shows the third person possessive subject following the first part of a complex predicate *ENÁ/ʔəné?* ‘come’ in the subordinate clause, while transitivity, subject and object suffixes appear on the following predicate *QONESES/kʷə́nəsəs* ‘see me’.<sup>22</sup> (17b) shows the second person possessive subject clitic preceding *TÁ,/łé?* ‘again’ in the subordinate clause, while the middle suffix appears on the predicate *SCÁSEN/skʷésəŋ* ‘ask for in marriage’. Finally, (17c) shows the third person possessive subject following the intensifying auxiliary *TÁ,/łé?* ‘too’ (homophonous with *TÁ,/łé?* ‘again’) in the subordinate clause, while inflectional affixes appear on the following predicate *KO,ŚENSES/ qʷaʔšənsəs* ‘accompany me’. The varied morphosyntactic properties of different possible clitic hosts will be discussed in more detail in the next section. For now, it is sufficient to point to the difference in behavior between possessive subject clitics, which can cliticize to hosts with varied morphosyntactic properties, and the transitivity, object and subject agreement suffixes, which only follow the main predicate.<sup>23</sup>

<sup>22</sup> The subject appears to be marked twice in (17a) and (17c), once with the possessive clitic and once with a subject suffix on the main predicate. The same type of double subject marking in transitive nominalized clauses is found in Squamish and with third person subjects in Halkomelem. See Davis 1999 for a diachronic account and synchronic analysis of subject marking in Salish that accounts for these facts.

<sup>23</sup> Note that the third person possessive clitic in (14c) precedes the past tense clitic. It may be that subordinate clause subject markers occupy a different ‘position’ within the 2PC string than matrix clause subject clitics. Since I only have a few examples where subordinate clause possessive subject clitics co-occur with other 2PCs, I leave investigation of their relative ordering to future research.

- (17) a.  $\text{S}\underline{\text{T}}\text{I},\text{s}$                        $\text{C}\text{S}$                        $\text{EN},\underline{\text{A}}\text{s}$                        $\text{QONESES}$                        $\text{T}\underline{\text{A}},$   
 $\text{s}\lambda\text{ís}$                        $\text{k}^{\text{w}}=\text{s}-$                        $\text{ʔ}\text{ən}\text{ʔ}\acute{\text{e}}=\text{s}$                        $\text{k}^{\text{w}}\acute{\text{ə}}\text{n}\acute{\text{ə}}\text{s}\acute{\text{ə}}\text{s}$                        $\lambda\acute{\text{e}}\text{ʔ}$   
 $\text{s}\sqrt{\lambda}\text{i}-\text{s}$                        $\text{k}^{\text{w}}=\text{s}-$                        $\text{ʔ}\text{ən}\text{ʔ}\text{e}=\text{s}$                        $\sqrt{\text{k}^{\text{w}}\acute{\text{ə}}\text{n}-\acute{\text{ə}}\text{t}-\text{s}-\acute{\text{ə}}\text{s}}$                        $\sqrt{\lambda}\acute{\text{e}}\text{ʔ}$   
 $\text{S}\sqrt{\text{desire}}-\text{3POSS SUB}=\text{NMLZ}-\sqrt{\text{come}}=\text{3POSS}$   $\sqrt{\text{see}}-\text{TR}-\text{1OBJ}-\text{3CNJ.SBJ}$   $\sqrt{\text{again}}$   
‘He wants to come see me again.’ (Montler, forthcoming a:319)
- b.  $\text{SQA}$                        $\text{CENS}$                        $\text{T}\underline{\text{A}},$                        $\text{SC}\acute{\text{A}}\text{SEN}.$   
 $\text{sk}^{\text{w}}\acute{\text{ə}}\text{y}$                        $\text{k}^{\text{w}}\acute{\text{ə}}=\text{ʔ}\text{ə}\text{n}=\text{s}-$                        $\lambda\acute{\text{e}}\text{ʔ}$                        $\text{sk}^{\text{w}}\acute{\text{e}}\text{s}\acute{\text{ə}}\eta$   
 $\text{s}\sqrt{\text{k}^{\text{w}}\acute{\text{ə}}\text{y}}$                        $\text{k}^{\text{w}}\acute{\text{ə}}=\text{ʔ}\text{ə}\text{n}=\text{s}-$                        $\sqrt{\lambda}\acute{\text{e}}\text{ʔ}$                        $\sqrt{\text{sk}^{\text{w}}\text{e}\text{s}-\acute{\text{ə}}\eta}$   
 $\text{S}\sqrt{\text{unable}} \text{SUB } \mathbf{2}\text{POSS}=\text{NMLZ}-\sqrt{\text{again}}$   $\sqrt{\text{ask.for.marriage}}-\text{MD}$   
‘You can’t go and ask for anybody anymore.’ (Montler, forthcoming a:319)
- c.  $\text{AXEN} \text{LE},$                        $\text{TE A},\text{LES}$   $\text{C}\text{S}$                        $\text{T}\underline{\text{A}},\text{s}$   $\text{LE},$                        $\text{U},$   
 $\text{ʔ}\acute{\text{e}}\text{x}\acute{\text{ə}}\eta=\text{l}\acute{\text{ə}}\text{ʔ}$                        $\theta\acute{\text{ə}}$   $\text{ʔ}\acute{\text{ə}}\text{y}\text{l}\acute{\text{ə}}\text{s}$   $\text{k}^{\text{w}}\text{s}-$                        $\lambda\acute{\text{e}}\text{ʔ}=\text{s}=\text{l}\acute{\text{ə}}\text{ʔ}$                        $\text{ʔu}$   
 $\sqrt{\text{ʔex}}-\acute{\text{ə}}\eta=\text{l}\acute{\text{ə}}\text{ʔ}$                        $\theta\acute{\text{ə}}$   $\text{ʔ}\acute{\text{ə}}\text{y}\text{l}\acute{\text{ə}}\text{s}$   $\text{k}^{\text{w}}\text{s}-$                        $\sqrt{\lambda}\acute{\text{ə}}\text{ʔ}=\text{s}=\text{l}\acute{\text{ə}}\text{ʔ}$                        $\text{ʔ}\acute{\text{ə}}\text{w}$   
 $\sqrt{\text{say}}-\text{MD}=\text{PST}$   $\text{DET Alice}$                        $\text{SUB}=\text{NMLZ}-\sqrt{\text{too}}=\mathbf{3}\text{POSS}=\text{PST}$   $\text{LNK}$
- $\text{K}\text{O},\text{S}\text{ENSES}$   
 $\text{q}^{\text{w}}\acute{\text{a}}\text{ʔ}\text{s}\acute{\text{ə}}\text{n}\text{s}\acute{\text{ə}}\text{s}$   
 $\sqrt{\text{q}^{\text{w}}\text{a}ʔ-\text{s}\acute{\text{ə}}\text{n}-\text{t}-\text{s}-\acute{\text{ə}}\text{s}}$   
 $\sqrt{\text{accompany-foot}}-\text{TR}-\text{1S.SBJ}-\text{3SB.SBJ}$   
‘Alice said that she stood by me too.’ (Montler, forthcoming a:7)

The conjunctive subject clitics, which appear in hypothetical and negated contexts (subjunctive/irrealis contexts), are shown in table 7.<sup>24</sup>

**Table 7. Conjunctive subject clitics**

	Singular	Plural
1 <sup>st</sup> person	EN/=ən	EETE/=ətə
2 <sup>nd</sup> person	EŴ/=əx <sup>w</sup>	EŴ/=əx <sup>w</sup>
3 <sup>rd</sup> person	ES/=əs	ES/=əs

Conjunctive subject pronouns, like possessive subject pronouns, distribute as clitics. In (18a), the conjunctive third person subject marker follows the intensifying auxiliary *EN,ÁN/ʔənén* ‘very’ in the second clause, rather than the main predicate of the subordinate clause *ĈEK/čəq* ‘big’, and in (18b) the conjunctive second person clitic follows negation *EWE/ʔəwə* ‘not’, rather than the predicate of the subordinate clause

<sup>24</sup> The conjunctive clitics bear a distinct similarity to main clause subject marking and are probably diachronically related (see Thompson 1979; Davis, 1999, 2000).

*YAY,E,/yéyá* ‘go’. (18c) shows that the conjunctive second person clitic follows the main predicate of the subordinate clause in the absence of a preceding eligible host.

- (18) a. ONESE SEN SE,                      E TFE SWÁTE ØE EN,ÁN,ES  
 ʔáŋəsə=sən=səʔ                      ʔə tθə swétə      kʷə ʔənʔén=əs  
 √ʔaŋ-ət-sə=sən=səʔ                      ʔə tθə s√wetə      kʷə ʔən~√ʔén=əs  
 √give-TR-2OBJ=1S.SBJ=FUT OBL DET S√sweater SUB PL~very-**3CNJ.SBJ**

U, ČEK. (Montler, forthcoming a:68)

uʔ čəq

ʔəw̄ √čəq

LNK √big

‘I’ll give you the sweater if it’s too big.’

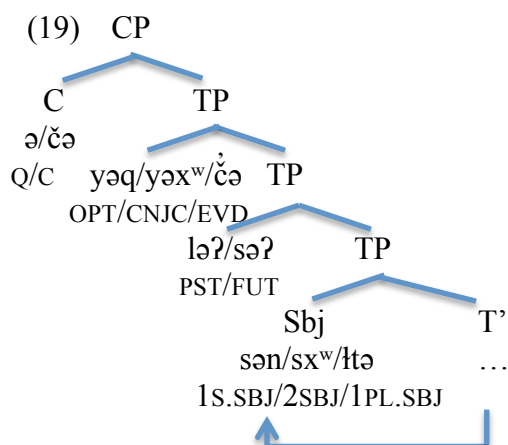
- b. AXEN ØE EWE EW                      S YAY,E. (Montler, forthcoming a:73)  
 ʔéxəŋ      kʷə ʔəwə=əxʷ                      s      yéyáʔ  
 √ʔex-əŋ      kʷə √ʔəwə=əxʷ                      s      yeʔ~√yeʔ  
 √say-MD SUB √not=**2CNJ.SBJ**      IRR      ACT~√go  
 ‘He said you shouldn’t go.’

- c. ȚÁ, SEN      U, YÁ, ØE YÁ, EW                      (Montler, 1986:240)  
 √léʔ=sən      ʔəw̄ √yéʔ kʷə √yéʔ=əxʷ  
 √also=1S.SBJ LNK √go SUB √go=**2SUB.SBJ**  
 ‘I’ll go if you go too.’

From the previous discussion, it is clear that there is a close relationship between subject 2PCs and clause type. For this to be represented in the syntax, it makes sense for subject clitics to be Spelled Out in the local environment of C.<sup>25</sup> I propose that subject clitics move to spec-TP, perhaps to check  $\phi$  features of the (null) T head and receive

<sup>25</sup> Wiltschko (2002:259) suggests that subject clitics in Upriver Halkomelem are inflected matrix complementizers. However, we have seen that, at least in matrix clauses, modal clitics can come between subject clitics and mood clitics realizing C, making this analysis untenable, at least in SENCŌFEN. I have not encountered any examples where the subordinate subject clitics co-occur with a modality clitic, so I do not know if the same ordering holds between subject and modal clitics in subordinate clauses as in matrix clauses. Note that the conjunctive clitics in table 7 have the shape VC. Since syllables in SENCŌFEN always have an onset (e.g. Kiyota, 2003) this suggests that these clitics may syllabify with their host, in contrast to matrix clause subject clitics. Similarly, the 3<sup>rd</sup> person possessive subject in (22a&c) is a single consonant and so is also unlikely to have the same phonological independence as matrix clause subject clitics. As a result, it may not be possible for modal clitics to come between subordinate subjects and their host, but it is still not probable that subordinate subjects realize C since they are realized on a host that occurs between the clitics and the subordinating complementizer *Ø/kʷ*.

nominative case.<sup>26</sup> This places them in the correct position within the clitic string, following the modality and tense clitics adjoined to TP. This provides another reason not to postulate a Modal head between C and T. If a Modal head intervened between C and T, the subject clitics in spec-TP would not be local to C.



### 2.1.5 Position 5: Varied clitics

Position 5 is often occupied by clitics that mediate between the speaker and the addressee. For instance, *OČE/ʔače* marks a clause as a sincere request for information; it occurs in *wh*-type questions, but is not obligatory for question formation, and is not used when the speaker knows the answer to the question (Montler, 1986:217). Thus, *OČE/ʔače* seems not to instantiate C, but rather to provide the listener with an indication of the speaker's intent.

- (20) a. STÁN OČE ŁÁ,E (Montler, 1986:217)  
 √stɛŋ=ʔačə lɛʔə  
 √what=REQ DEM  
 'What is this?'

<sup>26</sup> This leaves a puzzle as to why full DP subjects do not undergo movement to spec-TP. Perhaps the difference could be linked to the fact that full DPs are not marked for Case, while subject clitics are. Subject clitics are distinct from object suffixes, creating a nominative-accusative contrast (although in matrix clauses, third person intransitive subjects and third person objects are null, while third person transitive subjects are marked by an ergative suffix on the predicate, giving rise to a split-ergative system (Montler, 1986)). I leave investigation of this question for future research.

- b. STÁN ĚA,Ě  
√what DEM

Like *OĚ/ǵaĉe*, *ĚĚĆÁ/kʷǵĉe* mediates between the speaker and listener, indicating to the listener that the clause is intended either as an explanation or a request for an explanation (Montler, 1986:218). *ĚĚĆÁ/kʷǵĉe* is also independent of C, since it can occur in both declarative and interrogative clauses.

- (21) a. NIĚ ĚĚĆÁ TWEĚEL,KSET EĚS ĚĚĚNS  
√níĚ=kʷǵĉe txʷǵ-√tǵlǵ-set ǵǵ kʷs √kʷǵlǵŋ-s  
3.focus=EXPL MUT-flapping noise-REFL OBL DEM fly-3SBJ  
'That's why they make that flapping noise when they fly.'  
(Montler, 1986:218)

- b. XENIN ĚĚĆÁ EN ŠWYÁ,  
√xʷǵníŋ=kʷǵĉe ǵǵń-šxʷ-√yé?  
√how=EXPL 2POSS-REAS-√go  
'Why did you go?'

*KE/ǵǵ* 'emphatic' is used to indicate the speaker's certainty in a declarative, or insistence in a command (Montler, 1986:215).

- (22) a. ENÁ ĚE KE (Montler, 1986:215)  
√ǵǵńǵǵé=ĉǵǵ=ǵǵǵ?  
√come=CM=EMPH  
'Come!'

- b. EWENE KE STÁN  
√ǵǵéwe√neǵ=ǵǵǵ s-√tǵŋ  
√not√exist=EMPH NMLZ-√what  
'There is nothing.'

*ĚE/kʷǵǵ* is quite common in discourse, but not well understood (Montler, 1986:215-

6). It seems to be used when offering the addressee new information, perhaps information that the speaker believes is contrary to the addressee's expectation.<sup>27</sup>

<sup>27</sup> In this, it shows some similarity to the German discourse particle *doch* (Lindner 1991, as cited in Zimmermann, 2011:17), which can be used when the speaker believes the listener not to actively entertain or expect the propositional content of the clause.

- (23) a. *Œ* NE SŒESES LE, *Œ* (Montler, 1986:216)  
 k<sup>w</sup>ɪ-nə-s√k<sup>w</sup>ʔs-əs=ləʔ=k<sup>w</sup>əʔ  
 RLZ-1POSS-√send-EFFORT=PST=INF  
 ‘I already sent it.’  
 (Context given by informants (Montler, 1986:216): “if I were telling somebody” or “If you asked me”.)
- b. *Œ* EN SŒESES *Œ*  
 k<sup>w</sup>ɪ-ʔəñ-s√k<sup>w</sup>ʔs-əs=k<sup>w</sup>əʔ  
 RLZ-1POSS-NMLZ√send-EFFORT=INF  
 ‘You sent it.’

From the descriptions in Montler (1986), these last four clitics (*OŒE/ʔače*, *ŒEČÁ/k<sup>w</sup>əče*, *KE/ʔə*, *ŒE/k<sup>w</sup>əʔ*) seem to contribute to the expressive content of the clause, linking the propositional content of the clause to the context of utterance. More specifically, these clitics communicate information about the epistemic states of the discourse participants, a function is characteristic of discourse particles (Zimmerman, 2011).

The other clitics listed in position 5, *OL/ʔal* and *HÁLE/heləʔ*, are less clearly discourse related. *OL/ʔal* could be a discourse particle mediating between the speaker and the propositional content of the clause; Montler (1986) describes it as indicating that nothing more than what is said is implied. On the other hand, Shank (2003) analyzes *ʔal* in Samish, another dialect of Northern Straits, as a scalar exclusive particle in regular contexts and a scalar additive particle in negated clauses. When *ʔal* is used as a scalar exclusive particle, it involves an assertion that the proposition in the clause holds of the focused element, but not for any alternative, while creating a presupposition that all alternatives are more noteworthy than the focused element. In (24), the sentence with *ʔal* involves an assertion that the speaker did not eat more than three apples, but did eat three apples, as well as a presupposition that it would be more noteworthy for the speaker to have eaten more than three apples.

- (24)      ʔəw̄́ híx<sup>w</sup>=ʔal̄́      ápələs k<sup>w</sup>sə nə-s-ʔíłən      (Shank, 2003:157)  
 LNK three=LMT apples DET 1S.POSS-NMLZ-eat  
 ‘I just ate three apples.’      [Samish]

As a scalar additive particle, *ʔal̄́* involves an assertion that the proposition holds of the focused item, as well as a set of alternatives, while creating a presupposition that the alternatives are more noteworthy. Thus, in (25), there is an assertion that the subject did not see his grandparents, or an alternative to his grandparents, and a presupposition that all alternatives to his grandparents were less likely for him to visit.

- (25)      ʔəw̄́ ʔəwə=ʔal̄́ s-iʔ      ləŋ-ət-s      k<sup>w</sup>sə síləʔ-s      (Shank, 2003:158)  
 LNK neg=LMT IRR-PRT see-TR-3ERG DET grandparent-3POSS  
 ‘He didn’t (go) see even his grandparents.’

Note that this means that *ʔal̄́* as a scalar additive particle scopes above negation, since the assertion and set of alternatives are all negated propositions. Like the previously discussed position 5 discourse-related clitics, then, *ʔal̄́* seems to scope above the propositional content of the clause (including negation) and affect the pragmatic interpretation. However, if *ʔal̄́* can have an effect on the assertion or propositional content of the clause, the contribution of *ʔal̄́* does contrast somewhat semantically with the discourse-related position 5 clitics, which only contribute to the expressive content.

*HÁLE/helə* ‘2<sup>nd</sup> pluralizer’ is used when speaking directly to people contained within a specific group or in the same place (STOLČEĚL Elliott, personal communication); it is frequently translated as ‘you all’. It can be associated with either a second person plural subject or a second person plural object (Montler, 1986), and can be used without a second person subject marker in imperatives (26c) (Montler, personal communication).

- (26) a.  $\text{ØENINET LE, SW HÁLE}$  (Montler, 1986:219)  
 $\sqrt{k^w\acute{o}n\acute{i}-\eta-\acute{o}t=l\acute{o}^?=\text{sx}^w=\text{hel}\acute{o}}$   
 $\sqrt{\text{help-REL-TR=PST=2SBJ=2PL}}$   
 ‘You folks helped him.’
- b.  $\text{QENSTONE SEN HÁLE}$   
 $\sqrt{k^w\acute{o}n\text{-st-}\acute{\eta}\eta\acute{o}=\text{s}\acute{o}n=\text{hel}\acute{o}}$   
 $\sqrt{\text{see-CAUS-2OBJ=1S.SBJ=2PL}}$   
 ‘I showed you folks.’
- c.  $\text{ISTÁ HÁLE}$  (Montler, personal communication)  
 $\sqrt{?ist\acute{e}=\text{hel}\acute{o}}$   
 $\sqrt{\text{let's=2PL}}$   
 ‘let's (go)’

Thus, *HÁLE/helə* seems to function specifically as a pluralizer of the addressee, rather than of a specific argument of the clause.

The position 5 ‘varied’ clitics are difficult to position in the clause. Those that seem to be discourse particles might be expected to appear at the periphery of the clause, scoping higher than T and subject clitics, perhaps even above C (e.g. Zimmermann, 2011). However, they follow T and subject clitics, apparently occurring lower in the clause, though still in a position to scope over the core of the propositional content (the predicate plus any predicate modifiers and all arguments of the predicate). It is possible that there is some sort of head movement taking place to reorganize the clitics within the string into their surface order. On the other hand, it is not uncommon for adjuncts to appear in positions that do not exactly reflect their semantic scope (at least in English). For instance, ‘probably’ is considered an epistemic modal adverb that scopes above tense (Cinque, 1999), yet ‘probably’ is frequently found following auxiliaries in T.

- (27) He has probably left.

For simplicity, I will assume that the discourse particle-like clitics from position 5 adjoin above the highest projection that directly contributes to the core propositional content of

the clause. Whether this is problematic for scopal relationships holding between clitics within the clitic string is a matter for future research. Note, however, that German discourse particles also do not occur at the periphery of the clause, but rather at the edge of the verb phrase in a typical adverbial position (Zimmermann, 2011:29).

Given the discussion so far, *OL,/?al'*'s occurrence in position 5 is less puzzling than previously. While it probably scopes lower than the discourse particle-like clitics from position 5, it nevertheless seems likely to adjoin to *vP* (or the highest projection that contributes to the predicative content). As expected, *OL,/?al'* follows the position 5 discourse-related clitics when they co-occur.

- (28) HO, SEN *ŒE*, **OL**, MEL, E<sub>KT</sub> *ŒSÁ*, E (Montler, forthcoming b)  
 háʔ=sən=kʷə=**ʔal'** məláqt kʷséʔə  
 √haʔ=sən=kʷə=**ʔal'** √mələq-ət kʷseʔə  
 √if/when=1S.SBJ=INF=LMT √forget-TR DEM  
 'I might have forgotten something.' [P.27.78.5]

*HÁLE/hélə* remains somewhat puzzling. Since it can express plurality of either a subject or an object second-person argument, it is unlikely to be a case of fission, where the subject clitic's plural feature is 'fissioned' to be realized by a separate morpheme, as proposed by Halle and Marantz (1993) for certain Georgian pronouns. Moreover, *HÁLE/hélə* is separated from second person subject clitics by the 'Tense' clitics and also follows other 'position 5' clitics when it co-occurs with them (29), so these morphemes are not in a local relationship, as would be expected if they originally belonged to the same syntactic head which subsequently fissioned (c.f. González-Poot & McGinnis, 2005).

- (29) SU, *ŒTÁTENS*, "STONE<sub>T</sub> **SW** *ŒCE* **HÁLE?** *STÁŅ* **SW**  
 suʔ-čtétəŋ-s, "stáŋət=**sxʷ**=**ʔačə**=**hélə?** stéŋ=sxʷ  
 s-ŵ-√čtét-t-əŋ-s s√taŋ-ət=**sxʷ**=**ʔačə**=**hélə** s√téŋ=sxʷ  
 NMLZ-LNK-√ask-TR-PASS S√what-TR=**2SBJ**=**REQ**=**2PL** S√what=2SBJ

QENNEW?"

k<sup>w</sup>ənnex<sup>w</sup>?"

√k<sup>w</sup>ən-nəx<sup>w</sup>"

√see-NCTR

‘They were asked, “What is the matter with you? What did you see?”’ (MP)

(Montler, forthcoming a:77)

Indeed, semantically *HÁLE/hélə* expresses more than just plural, carrying the implication that the addressees are grouped together, either by common location or membership in a group (see above). Given this characteristic, *HÁLE/hélə* seems comparable to the quantifier ‘all’ in ‘you all’ or ‘y’all’, which can also occur with either a subject or object second person pronoun and is usually used when talking to a group of addressees who are all present, or belong to some larger group which is being referred to. As such, it does not scope over the propositional content of the clause, unlike the other position 5 clitics, though it does have a role linking the proposition to its context of utterance. For now, I will treat *HÁLE/hélə* as a collective quantifier that is associated exclusively with second person and undergoes quantifier float to occur within the clitic string, acknowledging that this requires further investigation.

### 2.1.6 Remaining 2PCs and interim summary

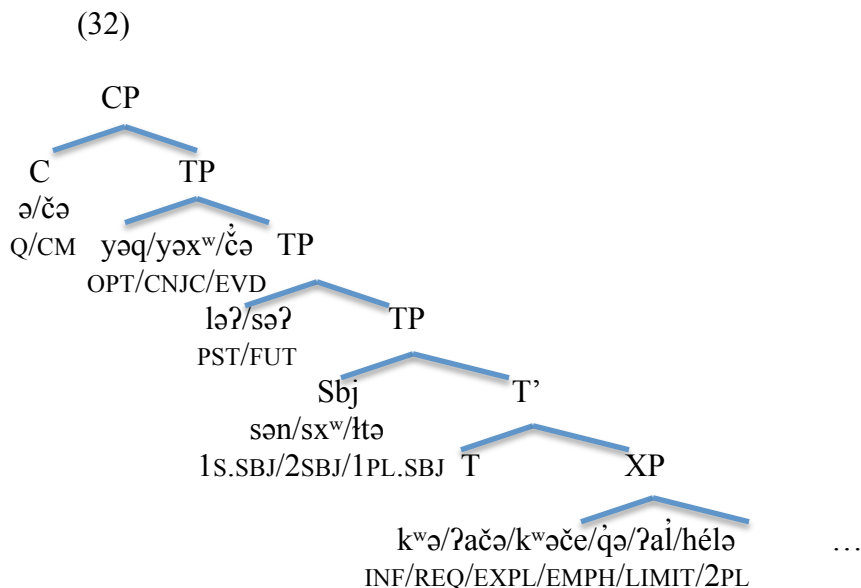
The remaining particles are varied and less frequently attested. *ĆTE/ćtə* ‘probable’ expresses that the speaker thinks the propositional content of the clauses is true, but is not sure (Montler, 1986:221). *WE, OĆE/wəʔačə* ‘presumptive’ is often translated ‘I guess’ and also seems to express a limitation on the speaker’s knowledge (Montler, 1986:222). Finally, *ĆEL/čəl* ‘encourage’ is quite rare, not appearing in Montler’s (1986) grammar at all, but it does appear several times in one of the stories.

- (30) a.  $\text{ØL KĒL ČTE}$                        $\text{ØSE KĒLEN}$      $\text{ØSE NE MÁN}$   
 $k^w\text{ł}-\sqrt{\text{q}}^w\text{ól}=\text{čtə}$                        $k^w\text{sə}$   $\sqrt{\text{q}}^w\text{ól-əŋ}$      $k^w\text{sə}$   $nə-\sqrt{\text{m}}\text{én}$   
 RLZ- $\sqrt{\text{barbeque}}<\text{ACT}>=\text{PRB}$  DEM  $\sqrt{\text{barbeque}}$  DEM 1S.POSS- $\sqrt{\text{father}}$   
 ‘My father’s barbeque must be ready.’ (Montler, 1986:222)
- b. NIĒ **WE, OČE ŠW** ELI ÍYMETs LE,  
 $n\text{íł}=\text{wa}\text{?ačə}$      $\text{šx}^w\text{-?ól}\text{i-}\sqrt{\text{?óy}}\text{-mət-s=lə?}$   
 3focus=**PRSM** REAS-CHAR<PL>- $\sqrt{\text{good-appearance-3POSS}}=\text{PST}$
- TSE I, **ŁČE=LE**,  
 $\text{tsə}$   $\sqrt{\text{?i?}}\text{-ł}\sqrt{\text{čé}}=\text{lə?}$   
 DEM ancestor (good relative PST?)  
 ‘I guess that’s why the ancestors were better looking.’
- c. HÍ U, EWENE TW **ČEL** OL,                      (Montler, forthcoming b)  
 $\text{háy ?əw} \text{ ówə} \text{ nət} \text{x}^w=\text{čəl}=\text{?al}$   
 $\sqrt{\text{hay}} \text{ ?əw} \sqrt{\text{əwə}} \sqrt{\text{ni-tx}^w}=\text{čəl}=\text{?al}$   
 $\sqrt{\text{alone}} \text{ LNK} \sqrt{\text{neg-}\sqrt{\text{exist-LETCAUS}}}=\text{ENC}=\text{LMT}$   
 ‘Go ahead and be the only one without it.’ [P.27.19.1]

$\text{K/q}$  ‘conditional’ is very infrequent and only appears in conditional structures (Montler, 1986:9).

- (31) HO, **K** LE, SEN    **ČTÁLE**,    NE SU,    **ELKELÁ** E **ČS**  
 $\sqrt{\text{ha}}\text{?}=\text{q}=\text{lə?}=\text{sən}$      $\text{č-}\sqrt{\text{télə}}$ ,     $nə\text{-s-əw-}$      $\text{?əlq-elá?}$      $\text{?ə}$   $k^w\text{s}$   
 if=**COND**=**PST**=1S.SBJ HAVE- $\sqrt{\text{money}}$  1S.POSS-NMLZ-LNK-  $\sqrt{\text{buy-STRUC}}$  OBL DEM
- ÁLEN**  
 $\text{?éləŋ}$   
 $\sqrt{\text{house}}$   
 ‘If I had money, I’d buy a house.’ (Montler, 1986:210)

Leaving aside these less attested clitics for now, I propose a peripheral clause structure as in (32) based on the discussion so far.



I represent position 5 as adjoined to XP, since the highest projection that contributes to the ‘core’ propositional content of the clause varies depending on whether there is an intensifying auxiliary or negation present, as will be seen below.

## 2.2 Clause structure in SENĆOŦEN

There are (at least) three syntactically distinct hosts that can precede the clitic string: predicates, intensifying auxiliaries (IAs), and negation. In this section, I will argue that these three categories can be distinguished on the basis of their morphological properties and their base syntactic position. I will also argue that these hosts are all base-generated lower than the 2PCs in the syntax.

### 2.2.1 Predicates as 2PC hosts

The predicate can be a bare root, if it is intransitive, but is often overtly inflected for aspect and transitivity. (33a) is an example of an intransitive actual predicate. (33b) is an example of the same root inflected with the causative suffix *-TEW/təxʷ* and the passive suffix *-EN/-əŋ*. (33c) shows the same root inflected for nonactual aspect.

- (33) a. YÁ,  
 √yé?  
 √go  
 'He/she/it goes.' (Montler, 1986:156)
- b. SU, YÁ, TENs TFE KÓ,  
 su?- yé?təŋ-s tθə q<sup>w</sup>a?  
 s-əw- √yé?-təx<sup>w</sup>-əŋ-s tθə √q<sup>w</sup>a?  
 NMLZ-CONTR-√go-CAUS-PASS-3POSS DET √water  
 'So she took the water.' (Montler, forthcoming a:376)
- c. ÇĹ I, YÆE,  
 k<sup>w</sup>t-ʔi?-yéyə?  
 k<sup>w</sup>t-i?-ye~√ye?  
 PRF-PROC-NACT~√go  
 'He's leaving now.' (Montler, forthcoming a: 376)

Any member of the open class of lexical roots can function as a predicate, including entity-type roots (34).

- (34) NE TÁN LE, (Montler, 1986:211)  
 nə-√tén=lə?  
 1POSS-√mother=PST  
 'It's my mother who's passed away.'

In contrast, DPs are not attested initially or functioning as predicates in SENĆOFEN; Jelinek (1996) also reports this ungrammatical for Lummi, another dialect of Northern Straits (35b).

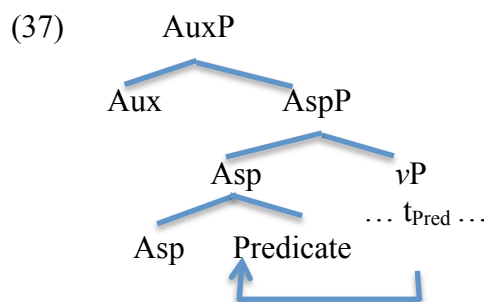
- (35) a. siʔəm=sx<sup>w</sup> (Jelinek, 1996:277)  
 √chief=2SBJ  
 'You are a chief.'
- b. \*tsə siʔəm=sx<sup>w</sup>  
 DET √chief=2SBJ  
 'You are the chief.' [Lummi]

Predicates can occur in a series with the second-position clitics following the initial predicate. YÁ, /yé? and EN, /ʔən?é have sometimes been characterized as auxiliaries (Czaykowska-Higgins & Leonard, 2015; Montler, 2003) in this type of construction,

since the inflection of the lower predicate determines whether the clause is active or passive (Jelinek 1996:281). In (36b), for instance, the subject clitic *SEN/sən* is not interpreted as the external argument of the initial intransitive predicate *YÁ,/yé?* (e.g. ‘I came’), but as the subject of a passive complex predicate (e.g. ‘I was come and seen/visited (by someone)’).

- (36) a. *YÁ, SEN IĒEN* (Montler, forthcoming a:374)  
 √yé?=*sən* √ʔiĕn  
 √go=1S.SBJ √eat  
 ‘I’m going to go eat.’
- b. *EN,Á SEN QENETEN* (Montler, forthcoming a:67)  
 ʔənʔé=*sən* kʷənətəŋ  
 √ʔənʔe=*sən* √kʷən-ət-əŋ  
 √come=1S.SBJ √see-TR-PASS  
 Somebody came to see me.

I propose that the predicate originates within the verb phrase, undergoing head movement to *v* and then to an aspect head, placing the predicate in a position preceding any overt DP subject in spec-*v*P. The Asp head can be realized by the ‘realized’ prefix *ĈL/kʷl-*, which precedes the predicate (Montler, 1986).<sup>28</sup> Any auxiliary would presumably occupy an auxiliary head higher than the aspect head hosting the predicate.<sup>29</sup>



<sup>28</sup> Montler (1986) labels *ĈL/kʷl-* as a pre-predicate particle, but analyzes it as a prefix in Montler, forthcoming a,b. This prefix is known as a prepredicate perfect particle in Kiyota (2008) and Turner (2015). I gloss the prefix as ‘realized’ following Montler (1986, forthcoming a, forthcoming b)

<sup>29</sup> Note that in some cases the same root, such as *YÁ,/yé?* ‘go’, can occur both in the auxiliary and in the predicate position. There are also cases of serial verb constructions in Straits Salish (e.g. Montler, 2008), where any of a string of predicates, including the initial predicate, may bear inflectional morphology. These may involve a different structure with a series of VPs. I leave this for future research.

### 2.2.2 Intensifying auxiliaries as 2PC hosts

The 2PCs may also be preceded by members of a closed class of ‘intensifying auxiliaries’ (IAs).<sup>30</sup> These auxiliaries have a distinct syntax from predicates, obligatorily preceding the predicate (or series of predicates) and co-occurring with a linker, either *U,/?əw* or *I,/?i?* (the choice of which linker occurs with which intensifying auxiliary seems to be lexically determined (Montler, 2003; Bäscher, 2014)). Some of the intensifying auxiliaries can also function as predicates with a shift in meaning, such as *XEN/x<sup>w</sup>əŋ*, which means ‘fast’ as a predicate, but ‘can/able’ as an IA (Claire Turner, personal communication; Timothy Montler, personal communication; see also Montler 2003 for similar facts in Klallam); similarly, *TÁ,/?é?* means ‘again’ as a predicate, but ‘too, also’ as an IA with the linker *U,/?əw* (Montler, forthcoming:319). On the other hand, *JÁN/čén* ‘really’ and *EN,ÁN,/?ən?én* ‘very’ never stand on their own as predicates, but are always followed by a linker and the main predicate; they are also not attested inflected for aspect or transitivity. As can be seen in (38b-c), the IA hosts any second-position clitics, while its accompanying linker follows the clitic string and precedes the predicate, or series of predicates (38c).

- (38) a. *JÁN, U, ČEK.* (Montler, forthcoming a:93)  
       *√čén ?əw √čáq*  
       ‘It’s really big.’
- b. *OO, EN,ÁN, ETE U, TSOS* (Montler, forthcoming a2)  
       *?áa, ?ən?én=łə ?u tsás*  
       *?aa ?ən~√?en=łə ?əw √tsas*  
       *oh PL~√very=1PL.SBJ LNK √poor*  
       ‘Oh, we are very pitiful.’ [P.27.26.1]

<sup>30</sup> Terminology adopted from Montler (personal communication; forthcoming a).

c. XEN SW I, YÁ, TES E TFE SNEWEL I, BEÇ  
 √x<sup>w</sup>óη=sx<sup>w</sup> ?i? √yé? √tás ?ə tθə s√nóx<sup>w</sup>əl ?i? √pǎk<sup>w</sup>  
 √can=2POSS LNK √go √arrive OBL DET √canoe CNJ rise.to.surface

EN,Á.

√?ən?é.

come

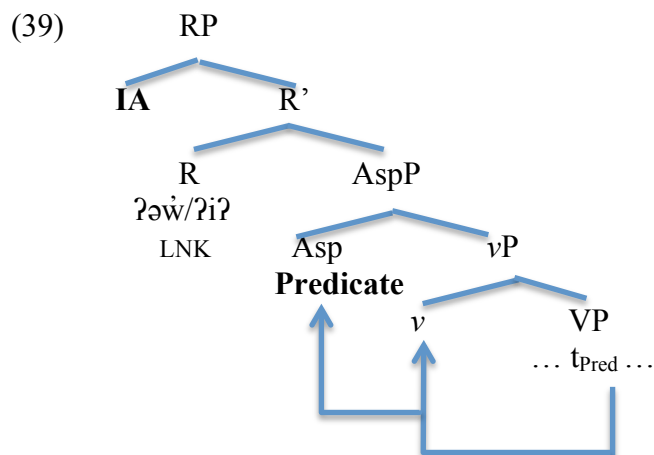
‘You can reach the canoe before they come up.’

(Timothy Montler, personal communication )

It is worth pointing out here that there is more than one *I,/?i?* and *U,/?əw* morpheme (Timothy Montler, personal communication ). Besides functioning as a linker in IA constructions, *I,/?i?* can be a conjunction, joining two clauses, predicates or DPs (e.g. (38c)). *I,/?i-* is also a prefix, glossed ‘procedural’ (e.g. (33c) (following Montler, forthcoming b)). Similarly, in addition to functioning as a linker with certain IAs, *U,/?əw* can be a prefix which signals that the state of affairs described in the following clause contrasts with some other situation in the speech participants’ shared context (e.g. (33b)) (Montler, forthcoming a:339).

For now, I hypothesize that the IA occurs in the specifier of a Relator Phrase (RP) with the linking morpheme *U,/?əw* or *I,/?i?* as the Relator head; this style of adverbial predication is adopted from Den Dikken 2006, who argues for functional heads that act as relators mediating predication relationships. In this case, *U,/?əw* or *I,/?i?* functions as a relator predicating the IA of the proposition it modifies.<sup>31</sup> Since the realized prefix generally precedes the predicate, but not IA’s, I propose that the RP occur higher than AspP (and likely higher than Aux, where Aux co-occurs with an IA in the same structure).

<sup>31</sup> Den Dikken (2006:30) gives the example ‘Imogan dances beautifully’, where *beautiful* is predicated of the proposition ‘Imogan dances’: [Imogan dances [Relator=-ly [beautiful]]]. He also argues that predication relationships are hierarchical but non-directional, so that the intensifying auxiliary in (34) can be predicated of the *v*P, even though the auxiliary is in the specifier of the relator phrase (p. 3).



### 2.2.3 Negation as a 2PC host

In addition to predicates and IAs, negation can also precede the 2PCs. *EWE/ʔəwə* ‘not’ generally occurs in two constructions. As in (40a), it can take a nominalized clausal complement; this negation construction is bi-clausal and widespread among Salish languages (Davis, 2005b). Alternately, negation is followed by irrealis marker *s* and an inflected predicate, as in (40b); this negation structure is monoclausal and less common among Salish languages (Davis, 2005b). Unlike the IAs *JÁN/čén* ‘really’ and *EN,ÁN/ʔənʔén* ‘very’, negation can also function as an independent predicate, taking inflectional morphology (Timothy Montler, personal communication) (40c-d).

- (40) a. I, EWE JE Ć ENÁs BEĆ (Montler, forthcoming b)  
 ʔiʔ ʔəwə=čə k<sup>w</sup> néʔ-s pək<sup>w</sup>  
 ʔiʔ √ʔəwə=čə k<sup>w</sup> √ʔənʔe-s pək<sup>w</sup>  
 CNJ √not=EVD SUB √come-3POSS √float  
 ‘But it never surfaced.’ [P.27.62]
- b. EWE JE S KÁ,ES ĆS FLEKTENs  
 ʔəwə=čə s qéyəs k<sup>ws</sup> θłəq<sup>w</sup>təŋ-s  
 √ʔəwə=čə s √qeyəs k<sup>w</sup>=s- √θłəq<sup>w</sup>-ət-əŋ-s  
 √not=EVD IRR √recent SUB=NMLZ-√pass.through-TR-PASS-3POSS

- TFÁ,ENEN (Montler, forthcoming b)  
 tθéʔə-nəŋ  
 tθeʔə-nəŋ  
 that-thing  
 ‘It’s not brought through nowadays.’ [P.27.56.3]
- c. EWE TW (Montler, personal communication )  
 ʔəwətɬ<sup>w</sup>  
 √ʔəwə-tɬ<sup>w</sup>  
 √not-CAUS  
 ‘refuse someone’ (“no someone”)
- d. EWETEN  
 ʔəwətəŋ  
 √ʔəwə-t-əŋ  
 √not-TR-PASS  
 ‘be rejected, refused’

As can be seen in (41a-b) above, *EWE/ʔəwə* (at least when uninflected) precedes the predicate. In the only two examples I have found where *EWE/ʔəwə* co-occurs with an IA, *EWE* also precedes the IA.

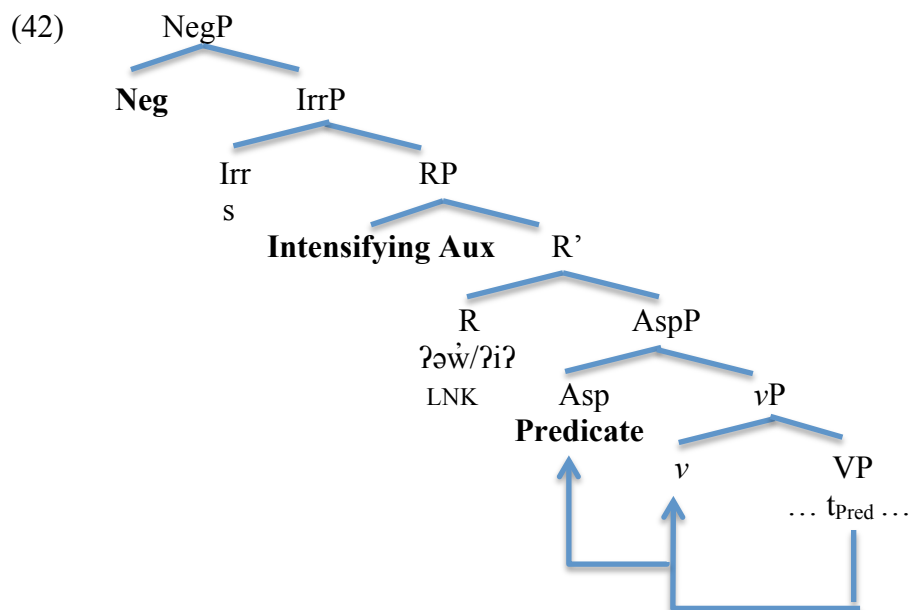
- (41) a. **EWE** *ŒE S ENÁN U, ÍY, TFE SWIW,LES* (Fieldnotes, 2015)  
 ʔəwə=k<sup>w</sup>əʔ s ʔənén uʔ ʔəý tθə swíwłəš  
 √ʔəwə=k<sup>w</sup>əʔ s ʔənén ʔəw̄ √ʔəý tθə s√wiwłəš  
 √not=INF IRR PL-√very LNK √good DET s√young.man  
 ‘The young man was really not doing very well (in a race).’ (LC)
- b. **EWE S ENÁN U, ŁEŁÁ,EC** (Turner, 2011:1750)  
 ʔəwə s ʔənén ʔu łəléʔək<sup>w</sup>  
 √ʔəwə s ʔən~√ʔen ʔəw̄ łə~√te<ʔə>k<sup>w</sup>  
 √not IRR PL~√very LNK NACT~√hurry<NACT>  
 ‘Don’t be in a rush; please don’t rush it; don’t hurry.’

This gives us the base syntactic order of Neg>IA>Predicate for the items that can precede the clitic string, when Neg occurs within the same clause as an inflected predicate. In

(42), I represent Neg as a head taking the irrealis morpheme *s* as its complement;<sup>32</sup>

<sup>32</sup> Note that the irrealis morpheme should not be mistaken for the nominalizing prefix *s-*. It is cognate with the irrealis/future morpheme *ks-/kt-* of the Interior Salish languages (Montler, personal communication).

however, it should be noted that both the syntax of negation and IA's requires further investigation, and these are only preliminary structures.<sup>33</sup>



Of course, the data above indicates that Neg can occupy the predicate position, in which case it may take a clausal complement.

#### 2.2.4 Summary

Based on the evidence reviewed above, I propose the following hierarchical structure for the lower part of the clause (without sorting out the details of the syntax internal to vP/VoiceP). I propose that negation occupies a distinct syntactic position depending on whether it is functioning as the main predicate or a negative head in a monoclausal negation structure, since it always precedes the main predicate in monoclausal negation structures and additionally precedes IAs, which precede the main predicate. As noted

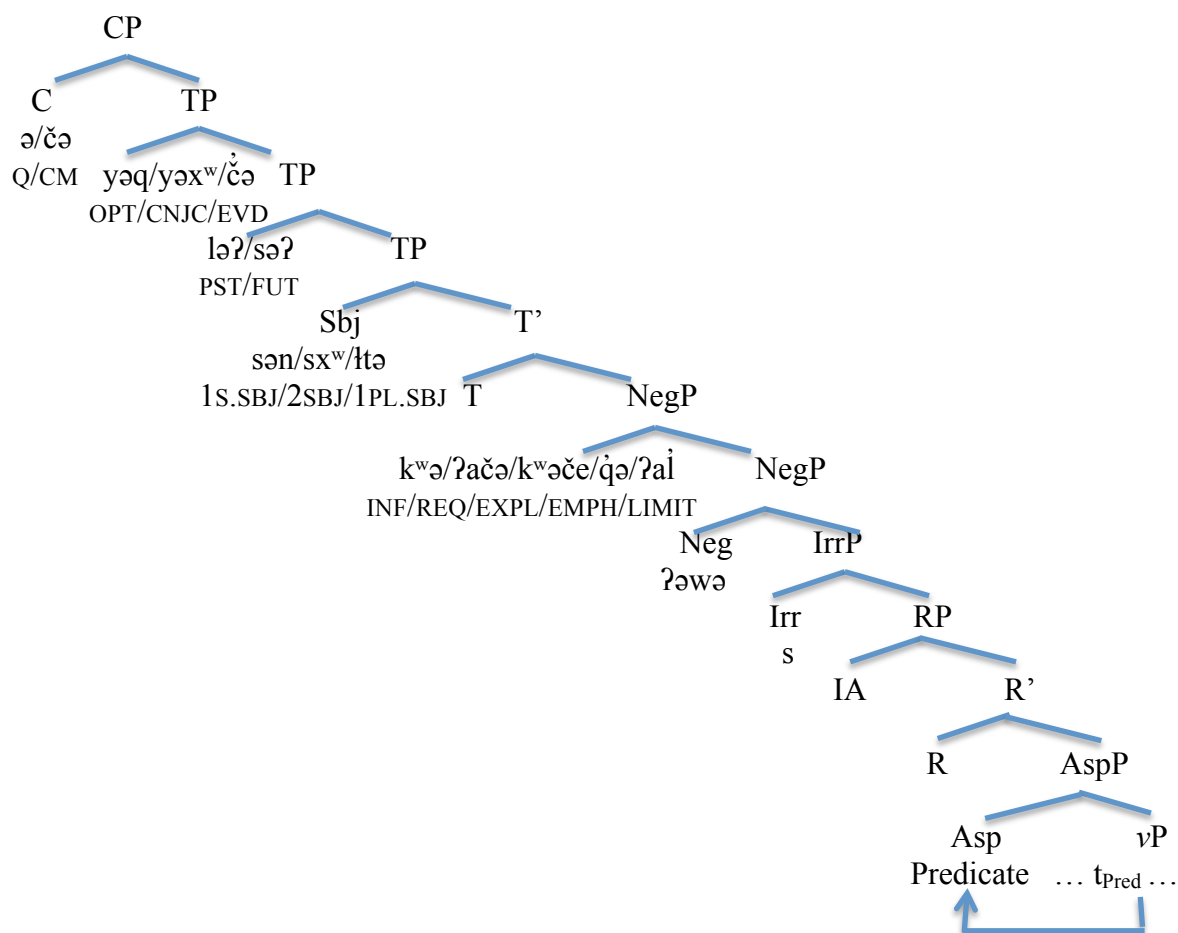
<sup>33</sup> If IAs and negation in monoclausal constructions behave syntactically parallel, this could indicate that negation in monoclausal constructions behaves as an adverbial, as in certain Romance and Scandinavian languages (Zanuttini, 1996, 1997). However, there is no immediate reason to suppose that this is the case. The structures are not entirely parallel (negation does not take a linking particle) and I do not have any evidence that there is freedom of ordering between IAs and negation, as would be expected if both are adverbial (with accompanying alterations of relative semantic scope).



If negation and an IA co-occur, negation will host the clitics, since it is higher in the clause.

Putting (43) together with the structure proposed for the left periphery gives the clause structure in (45). In (45), the 2PCs all scope above Neg; Neg is the highest head of the ‘core’ propositional content of the clause (essentially, the proposition minus tense). I assume that in the absence of a NegP projection, the position 5 clitics would adjoin to RP, or in the absence of RP to AspP, always adjoining to the highest projection associated with ‘core’ propositional content.

(45)



### **2.3 Conclusion**

In this chapter, I argue that the 2PCs occupy syntactic positions at the left periphery of the clause. The syntactic positions I propose for the clitics reflect their order within the clitic string, so that no head movement need be stipulated to reorder the clitics with respect to each other (although this leaves some puzzles, such as the relative ordering between first person subject clitics and tense clitics, which is variable; see fn.17). In the clause structure I propose, the 2PCs occupy syntactic positions above the syntactic positions where their potential hosts are base-generated. The potential hosts are arranged hierarchically and the highest potential host precedes the clitics in the final representation. This brings the analysis to the central question of this thesis: how is the relative order of the 2PCs and their host in the final representation derived?



### Chapter 3

#### MATCH-PHRASE and 2PCs in SENĆOTEN

In the previous chapter, I argue that there are (at least) three different types of 2PC host, all of which are merged below the 2PCs in the syntax; nevertheless, 2PCs follow their host in the final representation.

- (1) a.  $\text{ØENINET LE, SW HÁLE}$  (Montler, 1986:219)  
 $\sqrt{k^w\acute{o}ni\text{-}\eta\text{-}\acute{o}t=l\acute{o}?\text{-}sx^w=hel\acute{o}$   
 $\sqrt{help\text{-}REL\text{-}TR=PST=2SBJ=2PL}$   
 ‘You folks helped him.’
- b. OO, EN,ÁN, ŁTE U, TSOS (Montler, forthcoming b)  
 $?\acute{a}a, ?\acute{a}n?\acute{e}n=l\acute{o}$   $?\acute{u}$   $ts\acute{a}s$   
 $?\acute{a}a$   $?\acute{a}n\sim\sqrt{?en=l\acute{o}}$   $?\acute{o}w$   $\sqrt{tsas}$   
 $oh$   $PL\sim\sqrt{very=1PL.SBJ LNK}$   $\sqrt{poor}$   
 “Oh, we are very pitiful.” [P.27.26.1]
- c. EWE JE S  $\text{K}\acute{A},ES$   $\text{ØS}$   $\text{F}\acute{L}E\text{K}\acute{T}E\text{N}s$  (Montler, forthcoming b)  
 $?\acute{a}w\acute{o}=\acute{c}\acute{a}$   $s$   $q\acute{e}y\acute{o}s$   $k^ws$   $\theta\acute{t}\acute{a}q^wt\acute{a}\eta\text{-}s$   
 $\sqrt{?aw\acute{o}=\acute{c}\acute{a}}$   $s$   $\sqrt{qey\acute{o}s}$   $k^w=s\text{-}$   $\sqrt{\theta\acute{t}\acute{a}q^w\text{-}\acute{o}t\text{-}\acute{a}\eta\text{-}s}$   
 $\sqrt{not=EVD IRR}$   $\sqrt{recent SUB NMLZ}$   $\sqrt{pass.through\text{-}TR\text{-}PASS\text{-}3POSS}$
- $\text{T}\acute{F}\acute{A},\text{E}\text{N}\text{E}\text{N}$   
 $t\theta\acute{e}?\acute{a}\text{-}n\acute{a}\eta$   
 $t\theta e?\acute{a}\text{-}n\acute{a}\eta$   
 that-thing  
 ‘It’s not brought through nowadays.’ [P.27.56.3]

In this chapter, I propose that the placement of second-position clitics in SENĆOTEN derives from independently motivated principles of mapping between syntax and prosody. I adopt Selkirk’s Match Theory (2009, 2011) within which phonological constituents map to syntactic constituents, creating a prosodic structure that directly reflects the syntactic structure. Departures from a strict mapping between the syntactic structure and prosodic phrasing occur in response to phonological markedness constraints.

I propose that prosodic structure is computed post-Spell-Out in the P-computation component of the grammar. P-computation is a derivational component of the grammar that builds left-branching prosodic structure from the bottom up, mirroring syntactic structure. At each stage in the derivation, the prosodic structure is evaluated by constraints governing the mapping from syntactic to prosodic structure. In SENĆOFEN, three constraints play a major role in the derivation: MATCH-PHRASE, STRONG-START and LINCORR. MATCH-PHRASE is violated when syntactic phrasal nodes fail to map to prosodic phrases, creating a prosodic structure that does not reflect the syntactic structure. STRONG-START is a markedness constraint that arguably plays a role in evaluating the well-formedness of prosodic phrasing in languages as diverse as Xitsonga, a Bantu language, Serbo-Croatian, and Connemara Irish (Selkirk, 2011; Elfner, 2012). STRONG-START is violated when the leftmost constituent in a prosodic phrase is ranked lower in the prosodic hierarchy than its sister. LINCORR is a constraint that is violated whenever a syntactic node *x* that asymmetrically c-commands a syntactic node *y* is linearized following *y*.

In SENĆOFEN, I propose that STRONG-START is ranked above LINCORR, allowing a linearization violation in order to have a well-formed prosodic structure. However, STRONG-START is equally ranked with MATCH-PHRASE, so that a linearization violation can only take place where the linearization violation is not also associated with a MATCH-PHRASE violation. In effect, this means that linearization violations can only take place in the parsing of function words at the phase edge. This is because function words do not have sufficient prosodic structure to project a prosodic phrase at the edge of a Spell-Out

domain, but also cannot phrase with a prosodic constituent to their left since there are no more constituents to enter the derivation.

This chapter will proceed as follows. In section 3.1, I will introduce Match Theory, illustrating how Match Theory operates in SENĆOFEN to derive prosodic structure and 2PC placement. Section 3.2 gives a cursory analysis of the phonetic and phonological evidence for prosodic structure in SENĆOFEN, focusing on aspects of prosodic structure relevant to 2PC placement. Following this, section 3.3 provides a more complete analysis of 2PC placement in SENĆOFEN, accounting for 2PC placement in the various constructions discussed in chapter 2. In section 3.4, I argue that an account of 2PC placement in terms of the mapping to prosodic structure better accounts for 2PC placement than a syntactic account where the host moves to precede the clitics in the syntax.

### **3.1 MATCH-PHRASE in SENĆOFEN**

For the purposes of this analysis, I adopt Match Theory as applied in Elfner 2012, which provides an extensive and explicit account of the relationship between syntactic structure and prosody in Connemara Irish. In Elfner's analysis, MATCH-PHRASE is the primary means of mapping between syntax and prosody:

(2) MATCH-PHRASE (Elfner, 2012:28)

Suppose there is a syntactic phrase (XP) in the syntactic representation that exhaustively dominates a set of one or more terminal nodes  $\alpha$ . Assign one violation mark if there is no phonological phrase ( $\varphi$ ) in the phonological representation that exhaustively dominates all and only the phonological exponents of the terminal nodes in  $\alpha$ .

Syntactic phrases that do not introduce phonological material are 'pruned' in the mapping between syntactic and prosodic structure without violating MATCH-PHRASE, since they do

not contain phonological exponents of terminal nodes. As a result, prosodic structure reflects the recursive properties and constituent structure of the syntax, but is not isomorphic to syntactic structure, even in the absence of phonological markedness constraints such as STRONG-START.

Elfner (2012) argues that functional categories are visible at the mapping between syntax and prosody, but do not have sufficient phonological structure to project a dominating node of a different prosodic category than their sister node.

(3) Function Word Adjunction Principle (Elfner, 2012:145)

When a function word  $\alpha$  is adjoined to a prosodic category of type  $\beta$ , the prosodic (sub)category of the dominating node in the prosodic structure is identical to that of  $\beta$ .

The significance of (3) is that a function word can be parsed into a recursive prosodic word or a recursive prosodic phrase, depending on the category of its sister. In addition, Elfner (2012) argues that there are minimal prosodic phrases ( $\varphi_{\text{Min}}$ ) and non-minimal prosodic phrases ( $\varphi_{\text{NonMin}}$ ), prosodic phrases that dominate another prosodic phrase. Function words contrast with other prosodic constituents in that a function word adjoining to a minimal prosodic phrase will not create a non-minimal prosodic phrase. The distinction between minimal and nonminimal prosodic phrases does not play a role in my analysis, but it is important in Elfner's analysis, since it is involved in predicting the distribution of phrasal pitch accents in Connemara Irish.

I propose an alteration to the principle in (3) to distinguish between function words that are heads of branching nodes and function words that are both maximal and minimal projections. I propose that functional items that are heads of branching nodes are mapped according to the principle in (3); they introduce a prosodic category into the structure, but this prosodic constituent is recursive on the prosodic category it dominates. This is

illustrated in (4). In (4a), a function word X projects XP which dominates both  $X_{\text{func}}$  and YP. This means that XP will map to a recursive prosodic phrase above the prosodic phrase corresponding to YP (4b).



Under the Function Word Adjunction Principle, non-branching function words receive the same parsing. For non-branching function words, it is the node that immediately dominates X(P) in the syntax (e.g. ZP in (5a)) that maps to a recursive prosodic category (5b); however, this means that X(P) itself does not map to any prosodic constituent.

Despite this, the final prosodic representation is the same whether the function word is a  $X_{\text{func}}$  or a  $X_{\text{func}}(\text{P})$ .



This mapping does not capture differences in the prosodic behaviour of branching and non-branching function words in SENCÓFEN.<sup>34</sup> Therefore, I propose that function words that do not branch do not introduce a recursive prosodic category into the prosodic derivation, since an X(P) does not dominate another category in the syntax. Non-branching functional items also cannot themselves instantiate a prosodic phrase, so they

<sup>34</sup> Elfner also notes differences between the parsing of pronouns and the parsing of determiners and prepositions in Connemara Irish. Because she does not distinguish between the manner in which these different types of function words are parsed, she cannot account for why pronouns may parse leftwards, while prepositions and determiners always parse rightwards with their complements. She does account for the fact that object pronouns can post-pose, violating LINCORR, while prepositions and determiners cannot; she proposes a two-tiered LINCORR constraint, with a higher ranked version evaluating linearization between heads and their complements and a lower ranked version for evaluating phrases that are specifiers or adjuncts. I will return to how the account given here can be extended to pronoun post-posing in Connemara Irish in the next chapter.

will be added into the prosodic structure without introducing any (independent or dependent) prosodic phrasing. This is illustrated in (6). Since  $x_{\text{func}}(\text{P})$  lacks prosodic structure, MATCH-PHRASE is not implicated in the mapping of  $x_{\text{func}}(\text{P})$ , so that  $x_{\text{func}}(\text{P})$  will be parsed according to other constraints involved in prosodic structure building.



The altered function word mapping principle is given in (7):

- (7) Function Word Mapping Principle
- i) If a function word  $\alpha$  is the head of a branching node  $\alpha\text{P}$ ,  $\alpha$  projects the same prosodic (sub)category of the node it dominates in the prosodic structure.
  - ii) If a function word  $\beta$  is a maximal and minimal projection ( $\beta\text{P}$ ), it does not project any prosodic structure.

The effect of this modification will be that certain functional categories, such as determiners, will be evaluated by MATCH-PHRASE, while others, such as a pronoun in the specifier of a functional projection, are not. This distinction will allow the analysis to reflect key differences in the parsing of different types of function words in SENĆOŦEN.

Prosodic phrasing in SENĆOŦEN also comes under pressure from the markedness constraint STRONG-START, which formalizes a preference for left edges of prosodic phrases to be prominent. I adopt the definition of STRONG-START provided in Elfner 2012:157:

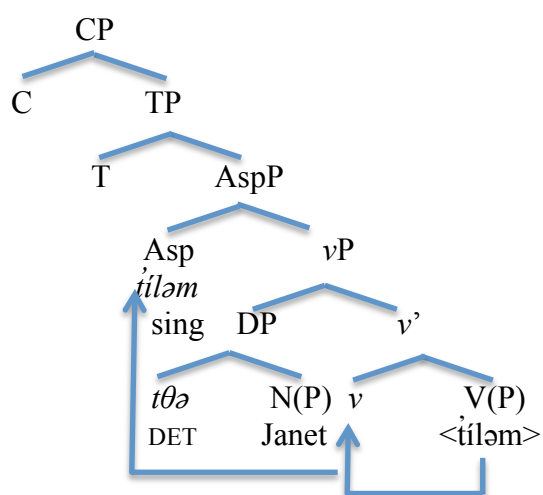
- (8) STRONG-START: assign one violation mark for every prosodic constituent whose leftmost daughter constituent is lower in the Prosodic Hierarchy than its sister constituent immediately to its right:  $*(\kappa_n \kappa_{n+1} \dots)$  (after Selkirk, 2011)

This gives sufficient background to illustrate the mapping between syntax and prosody with several examples. Let us first consider a case without any second position clitics.

- (9) DÍLEM t̪e Janet (Turner, 2015:2)  
 t̪iləm θə Janet  
 sing det.f Janet  
 ‘Janet sang; Janet is singing; Janet is going to sing; Janet sings; Sing, Janet.’

I assume that the predicate moves to an aspectual head above spec-*v*P (see section 2.2 in the previous chapter).<sup>35</sup> This gives the syntactic structure in (10).

(10)



Since the predicate has moved out of VP, VP does not contain any overt phonological exponents and will not map to a prosodic phrase. As a result, the N(P) *Janet* will be the most embedded prosodic phrase.<sup>36</sup>

<sup>35</sup> Alternately, overt DP subjects could be generated in a right branching specifier. However, this would not account for the fact that subjects generally precede objects in the rare cases where two overt DPs occur in the same clause (Czaykowska-Higgins & Leonard, 2015) and must precede objects when both subject and object are of equal animacy (Montler, 2003:110, f.10).

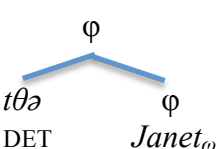
<sup>36</sup> Elfner (2012:153) also proposes a constraint Bin-Min to capture the preference for prosodic constituents to be binary (following e.g. Inkelas & Zec, 1990):

- (1) Bin-Min ( $\kappa$ ): assign one violation mark for every prosodic constituent of type  $\kappa$  that immediately dominates less than two daughter constituents.

While this constraint plays an important role in the analysis of Connemara Irish, this markedness constraint has a low ranking in SENĆOFEN and does not play an important role in the analysis of prosodic phrasing proposed here. This is because it is not uncommon for a single prosodic word to constitute a prosodic phrase in Salish languages (e.g. Beck, 1999; Koch, 2008).

(11)  $\varphi$   
*Janet*<sub>ω</sub>

Under the Function Word Mapping Principle, the determiner *tθə* will introduce a dominating prosodic phrase into the structure.

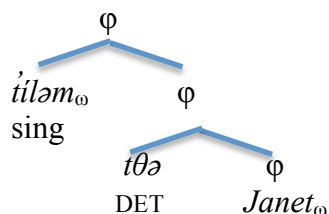
(12)  $\varphi$   
  
*tθə*       $\varphi$   
 DET      *Janet*<sub>ω</sub>

This stage of the derivation violates STRONG-START, since the determiner is lower in the prosodic hierarchy than its sister node. Since STRONG-START and MATCH-PHRASE are equally ranked, the derivation has two options at this point. The derivation can produce an output that is faithful to MATCH-PHRASE but violates STRONG-START, as shown in (12) above. Alternately, the derivation can leave the determiner unparsed until the predicate is introduced into the structure, avoiding a violation of STRONG-START, but creating a MATCH-PHRASE violation (13).

(13) *tθə*       $\varphi$   
 DET      *Janet*<sub>ω</sub>

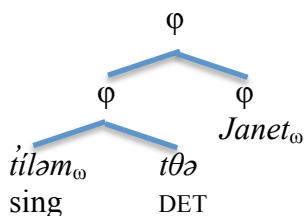
The predicate is the next phonological exponent to enter the prosodic derivation. If the determiner is parsed in the same phonological phrase as its complement, as in (14), the predicate will form a prosodic phrase with the DP, creating a prosodic structure that mirrors the syntactic structure.

(14)  $(\varphi (\omega \acute{t}iləm) (\varphi t\theta\acute{a} (\varphi (\omega Janet))))$



If the determiner is left unparsed as in (13), it will form prosodic phrase with the predicate when the predicate enters the prosodic structure, as in (15).

(15)  $(\varphi (\varphi (\omega \acute{t}iləm) t\theta\acute{a}) (\varphi (Janet_{\omega})))$



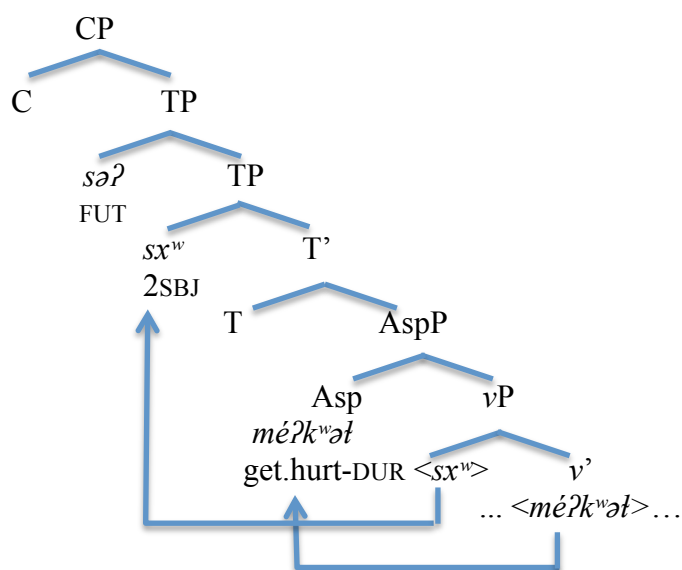
I will argue in the next section that determiners are indeed variably parsed, sometimes phrasing with a preceding prosodic category and sometimes parsing with their complement noun.

Note that since I am adopting an equal constraint ranking in part to account for variability, it would probably be more accurate to say that Strong-Start and Match-Phrase are equally weighted constraints, adopting a Noisy Harmonic Grammar approach (e.g. Legendre, Miyata, & Smolensky, 1990; Legendre, Sorace, & Smolensky, 2006; Coatzee & Pater, 2011); Elfner (2012) deals with variation in prosodic phrasing in Connemara Irish within this framework. However, the focus of this thesis is not on developing an account of how variation should be handled theoretically, so I will continue to refer to Match-Phrase and Strong-Start as equally ranked. This approach derives the correct results computationally and has the advantage of simplicity.

In clauses with second-position clitics, the mapping is slightly more complex. In (16), both 2PCs are non-branching function words; the subject pronoun occupies the specifier of TP and the tense adjunct adjoins to TP (16).<sup>37</sup>

- (16) MÁ,ØĒĒ SE SW (Montler, 1986:212)  
 √méʔkʷ-əł=səʔ=sxʷ  
 √get.hurt-DUR=FUT=2SBJ  
 ‘You will get hurt.’

(17)



Under the Function Word Mapping Principle, neither of these clitics will introduce prosodic structure into the prosodic derivation.

Prosodic structure building will begin with the most embedded phonologically overt constituent, the predicate. The predicate will map to a prosodic phrase.

<sup>37</sup> The durative suffix likely instantiates a functional projection within vP, occurring closer to the root than transitive morphology in cases where they co-occur (i).

i) MEQEĒĒT (Montler, forthcoming a:155)  
 √məkʷ-əł-ət  
 √all-DUR-TR  
 ‘to all do something’

(18)             $\varphi$   
                   *mé?k<sup>w</sup>əł<sub>ω</sub>*  
                   get.hurt-DUR

Next the second person subject clitic is introduced into the prosodic structure. The second person subject clitic can remain unparsed without violating MATCH-PHRASE, since it is a non-branching function word. Since phrasing with the predicate would violate STRONG-START, the clitic remains unparsed.<sup>38</sup>

(19) *sx<sup>w</sup>*             $\varphi$   
       2SBJ        *mé?k<sup>w</sup>əł<sub>ω</sub>*  
                   get.hurt-DUR

Next, the future tense adjunct clitic is introduced into the prosodic structure. It also does not introduce prosodic structure into the derivation. Since neither the future tense adjunct nor the subject clitic instantiate a prosodic phrase, they both remain unparsed at this stage.

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<sup>38</sup> Alternately, when the future clitic is added and proves to lack prosodic structure, the second person subject clitic might ‘tuck in’ to the existing prosodic structure, rather than remain unparsed (ia). Then, since the derivation has reached the edge of the Spell-Out domain of the phase, the future clitic must also be parsed. Again, since phrasing with the predicate to its right violates STRONG-START, the future clitic would ‘tuck in’, violating LINCORR, but not MATCH-PHRASE. The relative ordering between the subject clitic and tense clitic remains intact in order to avoid further LINCORR violations.

i) a. *sə?* ( $\varphi$  (<sub>ω</sub> *mé?k<sup>w</sup>əł*) *sx<sup>w</sup>*)    b. ( $\varphi$  (<sub>ω</sub> *mé?k<sup>w</sup>əł*)    *sə?* *sx<sup>w</sup>*)  
       FUT    get.hurt-DUR 2SBJ FUT            get.hurt-DUR FUT 2SBJ

This step-by-step version predicts that linearization violations could occur in locations other than the phase edge, but only when function word is preceded by a category lacking prosodic structure. This could occur with a structure like (i) if there were a prosodic category merged to the left of the future clitic. The future clitic could phrase with that category, avoiding a LINCORR violation, but the subject clitic would have already parsed following the predicate. However, this makes the wrong predictions for determiners preceded by oblique markers. If a determiner remained unparsed in order to avoid a MATCH-PHRASE violation, this derivation suggests that the determiner could follow the noun if the next category added to the prosodic derivation was another function word, an oblique marker. It is possible that this difficulty could be avoided by appealing to phase structure, since the noun belongs to the domain of the DP phase, while the determiner and oblique marker do not, creating a phonological boundary. Since it is simpler to assume that both clitics remain unparsed until the phase edge is reached, I will assume this version of the derivation.

- (20)  $səʔ$   $sx^w$   $\varphi$   
 FUT 2SBJ  $méʔk^wət_\omega$   
 get.hurt-DUR

At this point, the derivation has reached the edge of the Spell-Out domain of the phase. There is no category to the left of the clitics for them to phrase with, and they cannot remain unparsed. Parsing to the right would violate STRONG-START. Instead, the clitics ‘tuck in’ to the existing prosodic structure. Because the clitics lack prosodic structure, I propose that this occurs without violating MATCH-PHRASE,<sup>39</sup> but does violate the lower ranked (or weighted) constraint LIN-CORR (recall that the constraint ranking in SENĆOFEN is MATCH-PHRASE, STRONG-START >>LINCORR). The ordering between the clitics is preserved to prevent further violations of LINCORR.

- (21)  $(\varphi (\omega méʔk^wət))$   $səʔ$   $sx^w$   
 get.hurt-DUR FUT 2SBJ

Because STRONG-START is ranked above LINCORR, this structure is always derived instead of a structure where the clitics precede the predicate. This results in a prosodic structure where the clitics are mapped into a prosodic phrase with the predicate, but are not integrated into the prosodic word. In the next section, I will show that this is indeed the case (cf. Gerdts and Werle (2014) for Hul’q’um’inum’).

### 3.2 Prosodic structure in SENĆOFEN

In this section, I provide some basic background concerning prosodic structure in SENĆOFEN. I begin by discussing the prosodic relationship between the clitics and their

<sup>39</sup> Because this model of prosodic structure building is derivational, the reason that ‘tucking in’ does not violate MATCH-PHRASE could be because MATCH-PHRASE does not reanalyze earlier steps of the derivation. However, prosodic words cannot ‘tuck in’, even when they occur at the edge of a Spell-Out domain and must be parsed with a prosodic phrase to their right, in violation of STRONG-START. Possibly, this could be ruled out by the fact that ‘tucking in’ a prosodic word would violate STRONG-START, not by tucking in, but by failing to instantiate the prosodic structure that it would otherwise belong to under MATCH-PHRASE. I leave a more detailed account of how MATCH-PHRASE violations are avoided in cases of ‘tucking in’ for future research. The important observation is that there is a difference between the way the prosodic words and function words behave at the edge of a phase.

host, distinguishing between the prosodic word, including any suffixes, and the following clitics. I then provide a preliminary account of prosodic phrasing, showing that there is a preference for left edge prominence. In these sections, I provide some illustrative spectrograms taken from the recording transcribed in Montler (forthcoming b). My own fieldwork indicates that the prosodic structures shown in these figures are representative of the general parsing strategies of SENĆOŦEN speakers, but this should be verified in future research. The spectrograms cannot be taken as evidence for a particular argument, since they have not been analyzed statistically and do not represent examples collected in controlled environments; rather, the spectrograms are intended as illustrations of the parsing strategies described in the text. I leave a more complete investigation of SENĆOŦEN prosodic phrasing to future research (though cf. Leonard, 2010; Benner, 2006).

### **3.2.1 Words, suffixes and clitics**

While bare roots can function as words in SENĆOŦEN, it is common for words to be inflected with a series of suffixes. Assignment of word stress is quite complex (Montler, 1986; Leonard, 2007; Leonard, in prep); Leonard (2007) suggests that stress is nevertheless predictable, assigned to the head of a right-aligned trochaic foot, but that this regularity in stress assignment is obscured by sensitivity to a weight distinction between schwa and full vowels.

Despite the complexity of the system, it is clear that suffixes can bear word stress and the addition of a suffix can affect stress placement in the stem to which it attaches. In contrast, 2PCs do not receive word-level stress and, unlike suffixes, do not affect stress placement in the preceding word. This results in an interesting contrast in transitive main

clause stress assignment. While a first or second person clitic following a predicate will not affect stress placement within the word (22a-b), addition of the third person ergative suffix *-ES/-əs* results in stress shift (22c) (Montler, 1986:154). Note that stress shift affects the quality of the vowel.

- (22) a. *ETIN<sub>1</sub>ESTW<sub>2</sub> SEN*      b. *ETIN<sub>1</sub>ESTW<sub>2</sub> SW*      c. *ETEN<sub>1</sub>ISTES*  
 $\sqrt{?ət^{\theta}i-ŋə-stx^w=sən}$        $\sqrt{?ət^{\theta}i-ŋə-stx^w=sx^w}$        $\sqrt{?ət^{\theta}ə-ŋi-st-əs}$   
dress-REL-CAUS=1S.SBJ      dress-REL-CAUS=2SBJ      dress-REL-CAUS-3ERG  
‘I dressed him.’      ‘You dressed him’      ‘He dressed him.’

The phonological word is also the domain of a variety of word-level phonological processes that affect suffixes, but not 2PCs. For instance, the addition of the ergative suffix *-ES/-əs* in (22c) triggers loss of the final consonant *W/x<sup>w</sup>* of the preceding suffix *-STW/-stx<sup>w</sup>*, whereas the subject clitics do not trigger this deletion (Montler, 1986). In addition, the final /t/ of the control transitive suffix *-ET/-ət* deletes before the /s/ of the first and second person object markers, *-S/-s* and *-SE/-sə*, respectively (14a) (Montler, 1986). This rule does not apply when the control transitive suffix occurs before the initial /s/ of the first and second person subject clitics (23b).

- (23) a. *SČES SW*      (Montler, 1986:164, (5-6))  
*sčəs=sx<sup>w</sup>*  
 $/\sqrt{sč-ət-s=sx^w}/$   
spank-TR-1OBJ=2SBJ  
‘You spanked me.’
- b. *SČET SW*  
*sčət=sx<sup>w</sup>*  
 $/\sqrt{sč-ət=sx^w}/$   
spank-TR=2SBJ  
‘You spanked him.’

The clitics also differ from affixes in exhibiting greater freedom of distribution. They follow initial prosodic words, such as *ISTÁ/ʔisté* and *IA*'s, which do not take suffixes (see Chapter 2 for further discussion).<sup>40</sup>

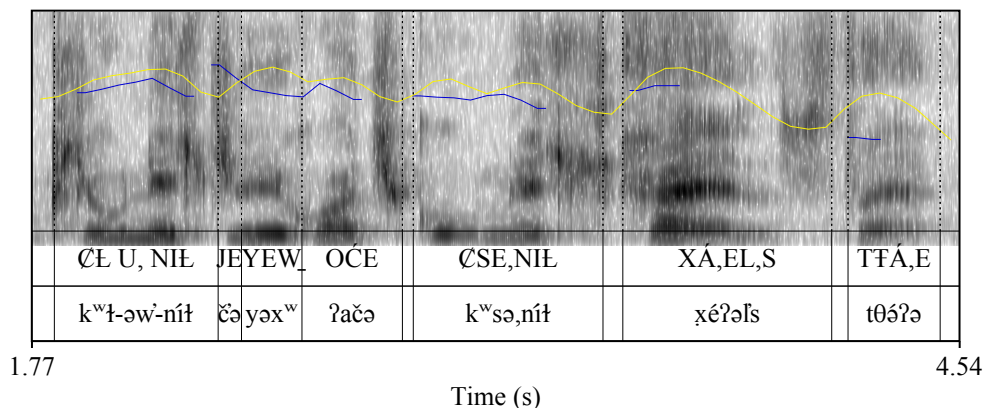
- (24) a. *ISTÁ* **ĆE**. (Montler, forthcoming a:88)  
 √ʔisté=**čə**  
 √let's=**CM**  
 'Let's go already.' (MJ)
- b. *OO, EN, ÁN, LTE* U, TSOS (Montler, forthcoming b)  
 ʔáa, ʔənʔén=**ltə** ʔu tsás  
 ʔaa ʔən~√ʔen=**ltə** ʔəw̄ √tsas  
 oh PL~√very=**1PL.SBJ** LNK √poor  
 'Oh, we are very pitiful.' [P.27.26.1]

However, although 2PCs are not integrated into the prosodic word that they follow, they are prosodically organized as a unit with the initial prosodic word. While prosodic words in a series can be set off by pauses (though not necessarily, especially in connected speech), there is never a pause between a host and the following 2PCs. Figure 2 is an example from the recording of the story in Montler (forthcoming b), analyzed using Praat (Boersma & Weenink, 2015). The intensity contour is shown in yellow and the pitch track in blue.<sup>41</sup> In figure 2, the close articulation of the three clitics *JE YEW OĆE/čə=yəx<sup>w</sup>=ʔačə* with the initial predicate *NIE/nił* and with each other contrasts with the articulation of the following prosodic words, which are pronounced slightly spaced apart from surrounding phonological material.

- (25) *ØL U, NIE JE YEW OĆE* *ØSEW, NIE XÁ, EL, S TFA, E.*  
 k<sup>w</sup>l-əw̄-√nił=**čə=yəx<sup>w</sup>=ʔačə** k<sup>w</sup>səwnił √xéʔ-əls tθéʔə  
 RLZ-CONTR-√3focus=**EVD=CJNC=REQ** that.one.inv √holy-ACTV DEM  
 'That, apparently, must have been the Creator.'  
 (Montler, forthcoming b) [P.27.14.4]

<sup>40</sup> Thanks to Timothy Montler (personal communication) for pointing out that *ISTÁ/isté?* 'let's' behaves differently than other predicates in this regard.

<sup>41</sup> There is a slight rise in pitch at the start of the 'evidential clitic' *JE/čə* and the 'request information' clitic *OĆE/ʔačə*; these are an effect of the immediately preceding fricative in each case.



**Figure 2. Articulation of second-position clitics.**<sup>42</sup>

Taken together, the phonological and phonetic evidence indicates that the clitics are not integrated into a prosodic word with their host, but are phrased prosodically as a unit with their host. I discuss the phonetic correlates of prosodic phrasing in the next subsection.

### 3.2.2 Prosodic phrasing in SENĆOTEN

In some languages, prosodic phrases are identifiable by their organization around a characteristic pitch accent (e.g. Beckman & Pierrehumbert, 1986). In SENĆOTEN, prosodic phrases are organized around a H\* pitch accent on the stressed syllable in the head of the phrase, followed by a declination in pitch to the end of the phrase (Leonard, 2010; Benner, 2006; see also Koch 2008 for Nłeʔkepmxcin). Left edges of prosodic phrases are notable for a rising pitch contour up to the H\* pitch accent and a partial pitch reset, if following a prosodic phrase in the same sentence. In contrast, right edges of prosodic phrases are associated with falling pitch and unstressed function words tend to parse leftwards to be pronounced at right edges of prosodic phrases. This gives left edges of prosodic phrases generally more prominence than right edges.

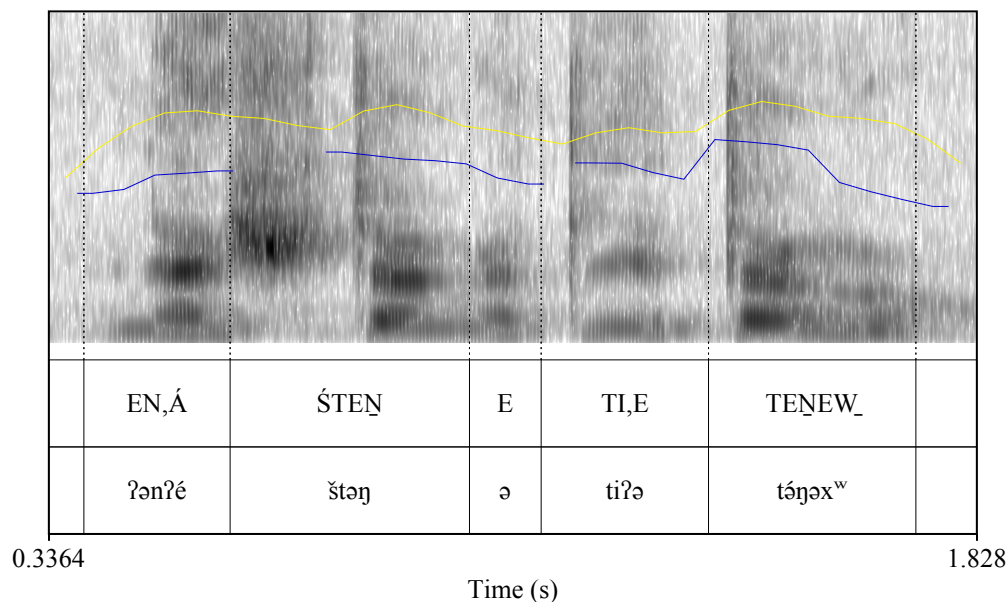
<sup>42</sup> As seen in figure 2, the clitic string is not without modulation. However, the vowels of the clitic string tend to be shorter and of lower pitch and intensity than the stressed vowels in prosodic words. The contrast between the clitics and their host is less clear in figure 2 than in other environments because the sentence is a clefting construction and the clitics' host, which introduces the focused constituent, is not itself prominent.

Figure 3 illustrates basic prosodic phrasing. The auxiliary and following predicate are parsed into an initial prosodic phrase.<sup>43</sup> An initial pitch rise begins on the auxiliary and peaks early in the stressed vowel of the head of the prosodic phrase *ŠTEN/štəŋ* ‘walk’. The pitch then falls to the end of the phrase. The oblique marker *E* is ambivalent here. It could belong to either prosodic phrase (see further discussion below). The pitch rises from the oblique marker to the demonstrative *TI,E/tiʔə*, giving a pitch reset typical of the left edge of prosodic phrases. The pitch peaks early in the stressed vowel of the head of the prosodic phrase *TENEW/təŋex<sup>w</sup>* ‘land’ and then declines to the end of the phrase. This gives approximately the prosodic structure:  $(_{1} (_{\varphi} (_{\omega} \text{ʔənéʔ}) (_{\varphi} (_{\omega} \text{stəŋ})))) (_{\varphi} \text{ʔə} (_{\varphi} \text{tiʔə} (_{\varphi} (_{\omega} \text{təŋəx}^{\text{w}}))))))$ .<sup>44</sup>

- (26) EN,Á ŠTEN E TI,E TENEW  
 ʔənʔé štəŋ ʔə tiʔə tənəx<sup>w</sup>  
 √ʔənʔe št-əŋ ʔə tiʔə √tənəx<sup>w</sup>  
 √come √walk-MD OBL this √land

<sup>43</sup> Initial uninflected predicates that occur frequently in collocation with a following inflected predicate have often been termed auxiliaries in the literature. However, it is not clear that these ‘auxiliaries’, at least in Straits Salish, function differently than an initial predicate in a serial predicate construction, which may or may not be inflected (e.g. Montler, 2008; Montler, personal communication). It would be interesting to investigate whether prosodic phrasing takes place in the same way in clauses that are clearly serial predicate constructions.

<sup>44</sup> The demonstrative, though a function word, may be a prosodic word, since it has a full vowel and is disyllabic.



**Figure 3. Prosodic phrasing in SENĆOTEN.**

Figure 4 illustrates basic prosodic phrasing in clauses with second-position clitics. The initial predicate *HO*,/háʔ bears word-level stress and is marked by a pitch rise. The following subject clitic is unstressed and marked by a drop in intensity (because the clitic has no voiced segments, there is no pitch-track for the clitic). The following predicate *ĶELNEN*/ qəlŋəŋ is marked by a H\* pitch accent and high intensity on the initial stressed syllable, bearing phrasal stress. This indicates that *HO*,/háʔ and *ĶELNEN*/ qəlŋəŋ are grouped together into a prosodic phrase and nuclear stress is assigned within this phrase. The pitch then falls to the end of the phrase; because the speech is quite rapid, it is difficult to tell which direction the oblique marker and determiner are parsing in, but the continued decline in pitch on the vowel of the oblique marker might indicate that the oblique marker and determiner parse leftwards here. The noun *XÁ,EL*,S/xéʔəlʔs bears

nuclear stress in the final prosodic phrase of the intonational phrase. This gives the prosodic structure:  $(\iota (\varphi (\varphi (\omega \text{ há?}) \text{ sx}^w) (\varphi (\omega \text{ qálnəŋ}) \text{ ?ə tʃ}) (\varphi (\omega \text{ xé?əls})))$ .<sup>45</sup>

(27) HO, SW            KĚLNENĚ            E TĚ XÁ,EL,S  
 há?= $\text{sx}^w$             qálnəŋ            ?ə tʃ xé?əls  
 $\sqrt{\text{há?}=\text{sx}^w}$          $\sqrt{\text{qəl-nax}^w\text{-əŋ}}$     ?ə tʃ  $\sqrt{\text{xé?əls}}$   
 $\sqrt{\text{if/when}=2\text{SBJ}}$   $\sqrt{\text{angry-NTR-PASS OBL DET}}$   $\sqrt{\text{holy-ACTV}}$

U, NEJTIN SW OL,

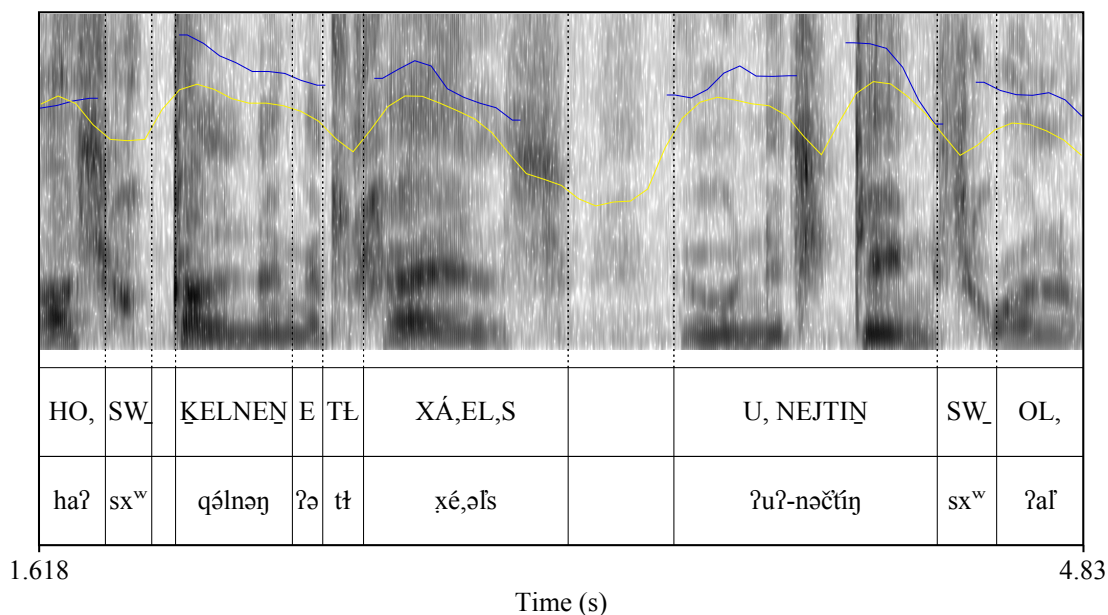
?u?-nəčtín= $\text{sx}^w$ =?al

?əw-neč-t<i> $\text{x}^w$ -əŋ= $\text{sx}^w$ =?al

CONTR- $\sqrt{\text{different-IN.CAUS<PERSIS>-PASS}=2\text{SBJ=LIMIT}}$

‘When the Creator gets mad at you, he will just make you different.’

[P.27.74.4]            (Montler, forthcoming b)



**Figure 4. Prosodic phrasing with second-position clitics.**

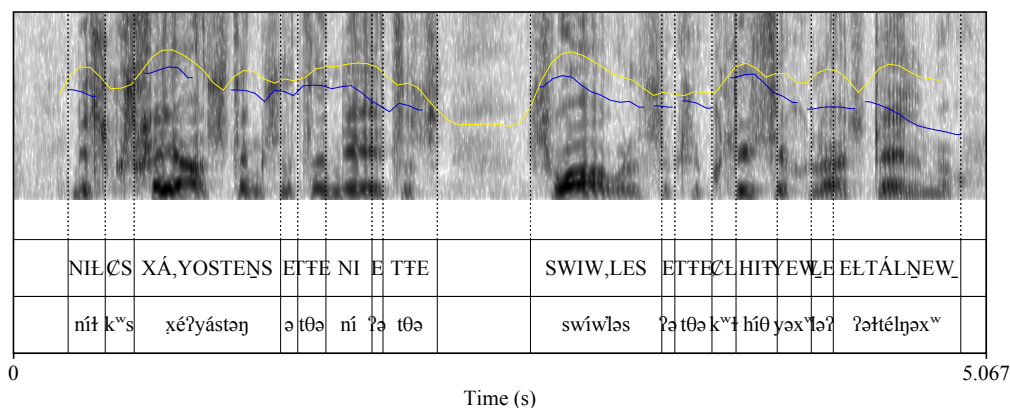
<sup>45</sup> This means that there are prosodic phrases that do not bear nuclear stress; the initial predicate plus second-position clitic are grouped into a prosodic phrase that does not receive nuclear stress. It is likely that nuclear stress assignment is sensitive to the difference between major and minor prosodic phrases (e.g. McCawley 1968; Beckman & Pierrehumbert, 1986; Kubozono, 1989), or perhaps minimal and nonminimal prosodic phrases (Ito & Mester, 2012; Elfner, 2012). Since stress assignment is not the focus of this thesis, I leave this to future research.

In the second clause, the pitch accent H\* falls on the second syllable of the predicate *NEJTIN/nə́ctiŋ* and the following second-position clitics, which are grouped into the same prosodic phrase, are marked by falling intensity and pitch. This gives the prosodic structure ( $\varphi$  ( $\omega$  ʔuʔ-nə́ctiŋ) sx<sup>w</sup> ʔal).

As in the case of the oblique marker and determiner in figure 4, function words are often, but not always, enclitic on the preceding prosodic word. This is illustrated more clearly in figure 5. Here, the oblique marker and determiner that introduce the noun *SWIW,LES/swíwłəs* ‘young man’ are enclitic upon the preceding prosodic word *NI/ni* ‘exist’ and continue the downward pitch contour and drop in intensity marking the end of the prosodic phrase.

- (28) NI<sub>L</sub>    ØS            XÁ,YOSTEN<sub>S</sub>                    E TFE NI,    E TFE  
 níł    k<sup>w</sup>s            ɣeʔyástəŋ-s                    ʔə tθə níʔ    ʔə tθə  
 √níł    k<sup>w</sup>=s-            √ɣəʔy-as-t-əŋ-s                    ʔə tθə √níʔ    ʔə tθə  
 √3.focus SUB=NMLZ- √argue-RECP-TR-PASS-3POSS OBL DET √exist OBL DET

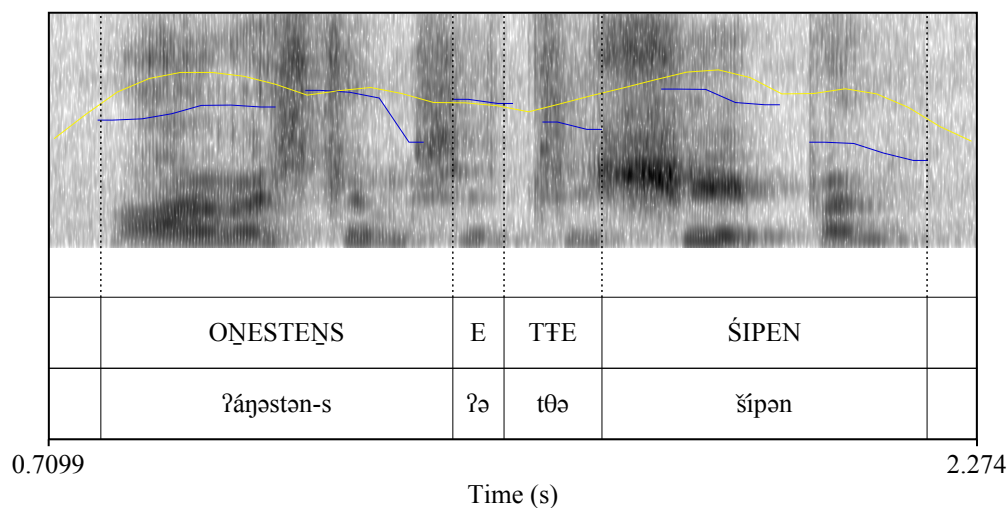
**SWIW,LES**    E TFE ØL HIF YEW LE,            EETÁLN<sub>EW</sub>  
**swíwłəs**    ʔə tθə k<sup>w</sup>łhiθ=yəx<sup>w</sup>=ləʔ            ʔəttéłɣəx<sup>w</sup>  
**s-√wiwłəs**    ʔə tθə k<sup>w</sup>ł-√hiθ=yəx<sup>w</sup>=ləʔ            √ʔətt-el-ɣix<sup>w</sup>  
**s-√young.man** OBL DET PRF-√long.time=CJNC=PST √person-ext-being  
 ‘It was when he was argued with by some young man of the people of long ago.’  
 [P.27.782]                    (Montler, forthcoming b)



**Figure 5. Enclitic oblique marker and determiner.**

On the other hand, figure 6 shows an oblique marker and determiner phrasing with the following noun. Here there is no break between the oblique marker, determiner and noun, and the oblique marker is marked by a partial pitch reset, which dips slightly on the unstressed determiner before peaking on the head of the prosodic phrase.

- (29) (SU,) ONESTENs E TFE ŠIPEN.<sup>46</sup>  
 (suʔ) ʔánəstəŋ=s ə tθə šípən  
 (s-əw̄-) √ʔan-as-ət-əŋ ə tθə √šip-ən  
 NMLZ-CONTR- √give-APPL-PASS-3POSS OBL DET √knife-INSTR  
 ‘So, he was given the knife.’ (Montler, forthcoming b) [P.27.36.2]



**Figure 6. Oblique marker and determiner phrase with noun.**

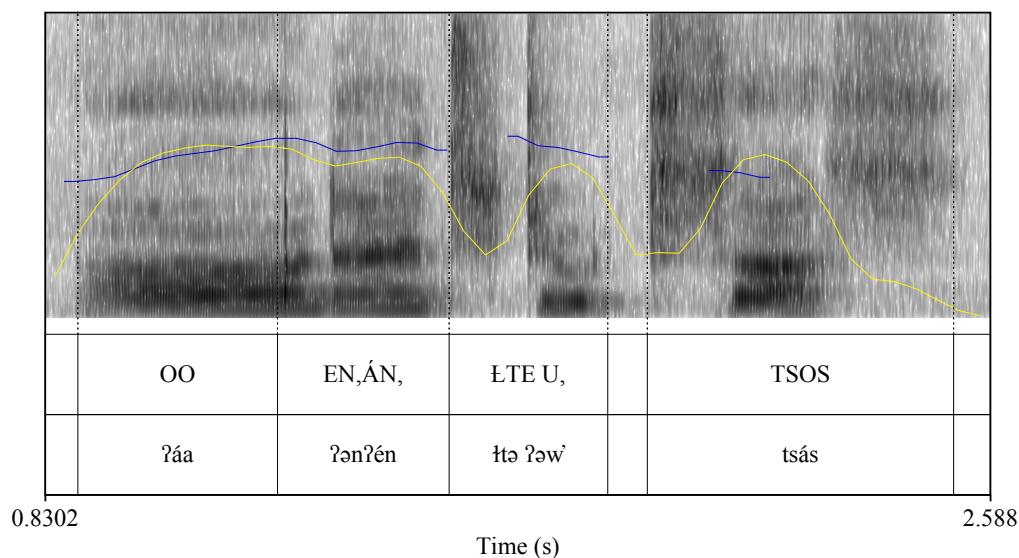
Other types of function words also have a tendency to parse leftwards. For instance, the linking particle in IA constructions seems to regularly parse leftwards with the preceding prosodic word. This is illustrated in figure 7, where the linking particle *U, /ʔəw̄* parses into an initial prosodic phrase with the IA and subject clitic, completely coarticulating with

<sup>46</sup> Here the linking element *SU, /səw̄* is enclitic on the preceding clause. This, like oblique marker and determiner enclitization is not uncommon. See Thompson 2012 for a syntactic account of such clause chaining nominalizations in Halkomelem Salish.

Depending on whether the *U, /ʔəw̄* in (28) is the same morpheme in the same position as that in (26), the contrast in parsing between the two examples could be taken as evidence that *U, /ʔəw̄* is, in fact, a clitic with variable direction of parsing, rather than a prefix. This requires further research.

the schwa vowel of the subject clitic and marking the left edge of the phrase with decreasing pitch and intensity.

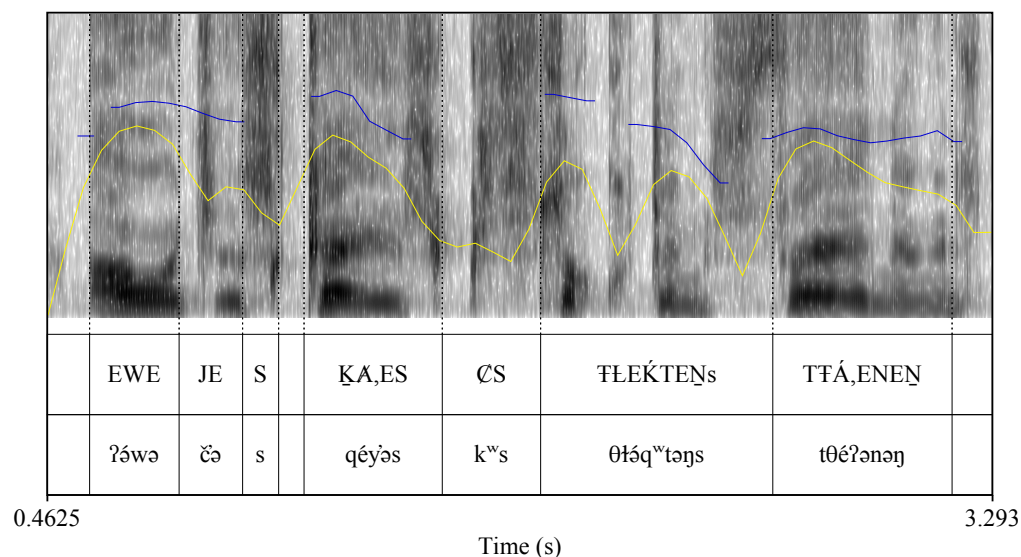
- (30) OO, EN,ÁN, ŁTE U, TSOS (Montler, forthcoming b)  
 ʔáa, ʔənʔén=łtə ʔu tsás  
 ʔaa ʔən-√ʔen=łtə ʔəw' √tsas  
 oh PL-√very=1PL.SBJ LNK √poor  
 "Oh, we are very pitiful." [P.27.26.1]



**Figure 7. Prosodic parsing in an IA construction.**

The irrealis *S/s* that accompanies negation in monoclausal negation constructions (see Chapter 2, section 2.2) also often parses leftwards. This is illustrated in figure 8, where the irrealis *S/s* parses into the same prosodic phrase as negation and the evidential clitic, being closely articulated with the preceding clitic and continuing the phrase-final drop in intensity.

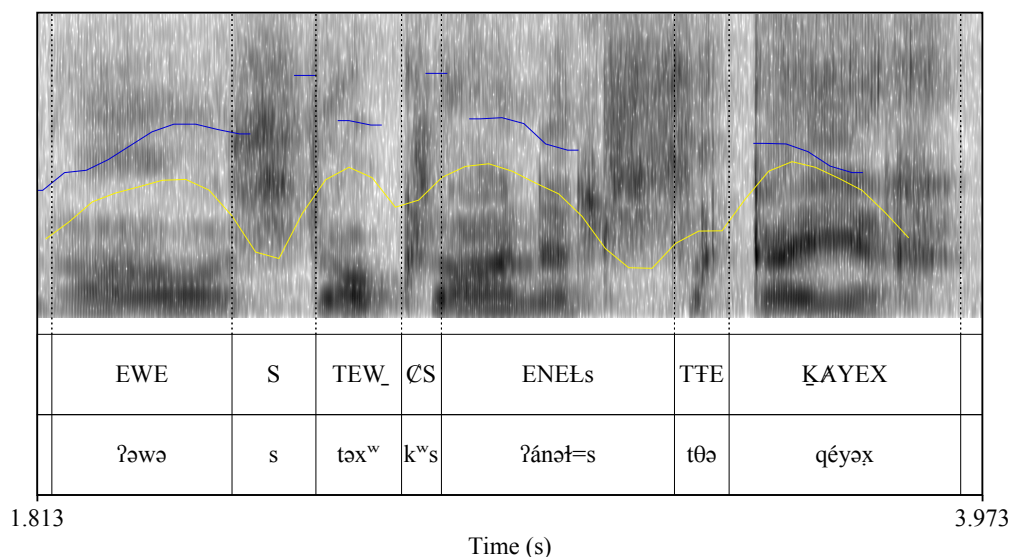
- (31) EWE JE S K̲A,ES ĆS FLEK̲TENs TFÁ,ENEN  
 ʔəwə=ćə s qéyəs k<sup>w</sup>-s θl̲əq<sup>w</sup>təŋ=s tθéʔənəŋ  
 √ʔəwə=ćə s √qéyəs k<sup>w</sup>-s √θl̲əq<sup>w</sup>ət-əŋ tθeʔə-nəŋ  
 √not=EVD IRR √recent SUB-NMLZ- √pass\_through-TR-PASS=3POSS that-thing  
 'It's not brought through nowadays.' [P.27.56.3] (Montler, forthcoming b)



**Figure 8. Prosodic parsing in monoclausal negation constructions.**

The parsing of the irrealis marker is not always so clearly leftward, however. For instance, in figure 9, the irrealis *S/s* could belong to phrasing with either the preceding or following prosodic word, closely articulated with initial stop of the following predicate *TEW/təxʷ* ‘exactly’, but without a pause between *EWE/ʔəwə* and the irrealis marker that would clearly indicate a rightward parsing.

- (32) EWE S TEW ϸS ENEŁs TΨE ΚΑΥΕΧ.  
 ʔəwə s tətʰxʷ kʷs ʔánəł=s tθə qéyətʰ  
 √ʔəwə s √tətʰxʷ kʷ-s- √ʔən-əł=s tθə √qeyətʰ  
 √not IRR √exactly SUB-NMLZ-√comply=3POSS DET √liar  
 ‘But Liar didn’t comply.’ [P.27.32.4] (Montler, forthcoming b)



**Figure 9. Prosodic phrasing of the irrealis s.**

For the purposes of this thesis, I hypothesize that the irrealis *S/s* parses variably, like determiners and oblique markers, leaving a more complete analysis to future research.<sup>47</sup>

The characterizations of the prosodic phrasing given here are very preliminary, especially with regards to the linking particle in IA constructions and the irrealis marker in monoclausal negation constructions, since the descriptions are based on just a few examples. The purpose of these descriptions is to give a basic illustration of prosodic structure, so that it is possible to motivate an account of the mapping from the syntactic structures proposed in chapter 2 to the corresponding prosodic structures. In the next section, I will show that the theoretical approach correctly predicts the prosodic structures illustrated in this section, focusing on the parsing of second-position clitics, but showing that the approach also derives the correct prosodic phrasing for other function words discussed in this section.

<sup>47</sup> One reason I hypothesize the irrealis *S/s* to be variable in its direction of parse is that it can form an onset to a following *I/ʔiʔ* morpheme (either the conjunction or PROC morpheme), which can itself parse leftwards or rightwards. However, at this point, I do not have any examples that clearly show in the spectrogram that the joint morphemes *SI/siʔ* are parsing rightward.

### 3.3 Prosodic phrasing and 2PC placement in SENĆOTEN

In this section, I argue that the constraint ranking proposed at the beginning of this chapter correctly predicts the placement of 2PCs for constructions with each type of clitic host discussed in Chapter 2. At the same time, these constraints also correctly predict the correct prosodic phrasing for each of these structures, so that 2PC placement follows from independently required principles of prosodic phrasing. I will begin by tackling the question of how branching 2PCs are parsed (the clitics that occupy C), a question briefly tackled in the introduction, but not yet illustrated with a concrete example. I then give an analysis of how the prosodic derivation takes place in IA constructions, negation constructions, subordinate clauses, and DPs with 2PCs.

#### 3.3.1 Branching 2PCs

Under the Function Word Mapping Principle that I propose at the beginning of this chapter, nonbranching function words lack prosodic structure. In section 3.1, I propose that 2PC placement takes place because non-branching function words can ‘tuck in’ to the existing prosodic structure without violating MATCH-PHRASE, being prosodically deficient (and without a prosodic category to phrase with to their left). However, the Function Word Mapping Principle (repeated here as (33)) predicts that branching function words, such as the 2PCs that realize C, will introduce prosodic structure into the derivation:

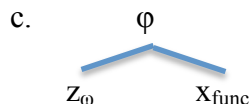
- (33) Function Word Mapping Principle
- i) If a function word  $\alpha$  is the head of a branching node  $\alpha P$ ,  $\alpha$  projects the same prosodic (sub)category of the node it dominates in the prosodic structure.
  - ii) If a function word  $\beta$  is a maximal and minimal projection ( $\beta P$ ), it does not project any prosodic structure.

Under this set of assumptions, the 2PCs that realize C should not be able to ‘tuck in’ without violating MATCH-PHRASE, contrary to fact.

However, there are two plausible explanations for the behaviour of these branching 2PCs. The first explanation exploits the derivational model proposed here. Branching function words project a prosodic category that is ‘recursive’ on the prosodic category it dominates. However, the syntactic category below C, T, is null. If null morphemes enter the prosodic derivation, the prosodic category projected by clitics in C will be recursive on a null category (alternately, the null category could simply intervene between the clitics in C and lower prosodic structure, preventing the clitics in C from creating a recursive prosodic structure above the lower prosodic categories).

The derivation would be something like that in (34). A null head enters the prosodic derivation above the prosodic phrase dominating  $z_0$ . Then  $x_{\text{func}}$  is added to the structure. Since the null head is not relevant to MATCH-PHRASE (which only makes reference to overt phonological exponents), suppose that it is ‘pruned’ from the structure at this stage. Nevertheless, by hypothesis, the presence of the null head when  $x_{\text{func}}$  is added means that  $x_{\text{func}}$  does not ‘adjoin’ to the prosodic phrase dominating  $z_0$  and therefore is not dominated by a prosodic phrase under the Function Word Mapping Principle (33i). Since  $x_{\text{func}}$  lacks prosodic structure, it can phrase following the prosodic word  $z$  without violating MATCH-PHRASE at the next stage of the derivation (34c). This avoids a STRONG-START violation, but incurs a violation of the lower ranked LINCORR, just as for the parsing of nonbranching 2PCs.





The second explanation appeals to the position of the 2PCs in C, occupying the edge of the matrix clause Spell-Out domain.<sup>48</sup> It is possible that the type of recursive prosodic phrasing introduced by branching function words is not permitted at the edge of a Spell-Out domain, but must instantiate an intermediate prosodic category. This could be motivated by the way that MATCH-PHRASE evaluates these cases of recursive prosodic phrasing. When a branching function word is introduced into the structure, it projects a prosodic category that is recursive on the prosodic category of the function word's sister. At the next stage of the derivation, the function word will be 'visible' to MATCH-PHRASE because it is associated with a prosodic phrase. However, where there is no higher prosodic structure, the parsing of the function word is not evaluated based on whether the function word is visible to MATCH-PHRASE from above, but rather based on whether it is visible *within* the prosodic phrase it projects. Supposing its prosodic deficiency causes it to be invisible within its prosodic phrase, the prosodic phrasing introduced by the function word will not survive at the phase edge (the prosodic phrase that it projects will be evaluated as empty). At this point, the function word lacks prosodic structure and can 'tuck in' to the existing prosodic structure, violating LINCORR, but not MATCH-PHRASE.

Either of these explanations could handle the branching 2PCs in SENĆOŦEN under the analysis of clause structure adopted in this thesis. The first approach predicts that branching function words will only incur linearization violations where adjacent to a null morpheme; since T is always null and branching 2PCs occur above T in SENĆOŦEN,

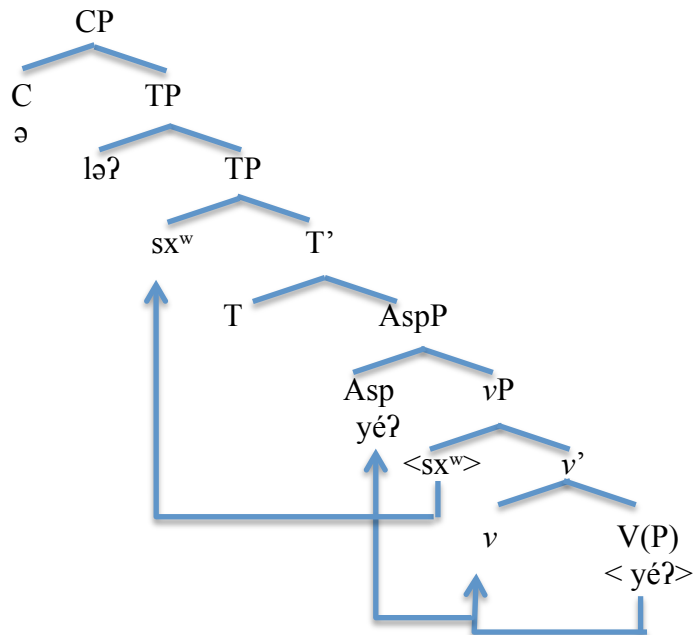
<sup>48</sup> I propose that merging all the items in the numeration (e.g. Chomsky 2001) triggers Spell Out of the entire CP, rather than only the Spell Out domain of CP (which would be TP).

this approach predicts the correct derivation. The second approach predicts that linearization violations involving function words will only be possible where they occupy the edge of a Spell-Out domain. Since the only 2PCs which are branching in this analysis occupy C in matrix clauses, this approach also predicts the correct derivation. Future research could examine the behaviour of branching function words in other languages that share the same constraint ranking with SENĆOŦEN to determine which environments allow linearization violations to occur. For now, I will adopt the first approach, since it more obviously follows from independently motivated principles of derivational linguistics, but will return to the second analysis during the discussion in chapter 4.

Having developed an account of the parsing of branching 2PCs, I will provide the derivation for a concrete example (35). (35) has the syntactic structure in (36).

- (35) YÁ, E LE, SW (Montler, 1986:2-3)  
 yéʔ=ə=ləʔ=sxʷ  
 √go=Q=PST=2SBJ  
 ‘Did you go?’

(36)



P-computation will begin with the most embedded node that has a phonological exponent, the predicate in Asp. AspP is mapped to a prosodic phrase.

(37) ( $\varnothing$  ( $\omega$  yéʔ))

Next, the null T head enters the derivation. Then, the subject clitic is added to the structure, and the null T head is ‘pruned’ from the structure because it lacks an overt phonological exponent. The subject clitic remains free in order to avoid violation of STRONG-START and LINCORR; this does not violate MATCH-PHRASE, since the subject clitic is a nonbranching function word. Addition of the past tense clitic means that there are two unparsed function words. Next, the phase head C enters the computation. Since two clitics lacking prosodic structure intervene between the yes/no question clitic and the lower prosodic structure around the predicate, the yes/no question clitic cannot project a prosodic phrase; even if there were no intervening clitics, the yes/no question clitic would

be prevented from projecting a recursive prosodic phrase above the predicate by the null T morpheme, as discussed above.

(38)      ə ləʔ s<sup>xw</sup> (φ (ω yéʔ))

Unparsed material is not permitted at the completion of the phase. Since the three clitics lack prosodic structure, these function words can map within the previously introduced structure without violating MATCH-PHRASE. In order to avoid violating STRONG-START, the predicate will precede all of the function words, incurring violations of the lower ranked LINCORR. The function words will be faithful to their input ordering, since any reordering among them incurs an additional violation of LINCORR. The resulting prosodic structure is given in (39).

(39)      (φ (ω yéʔ) ə ləʔ s<sup>xw</sup>)

This results in a prosodic structure where the clitics are mapped into a prosodic phrase around the predicate, but are not integrated into the prosodic word. This matches the prosodic structure of SENĆOTEN as analyzed in the previous section (figures 1 & 2; cf. Gerdts & Werle, 2014).

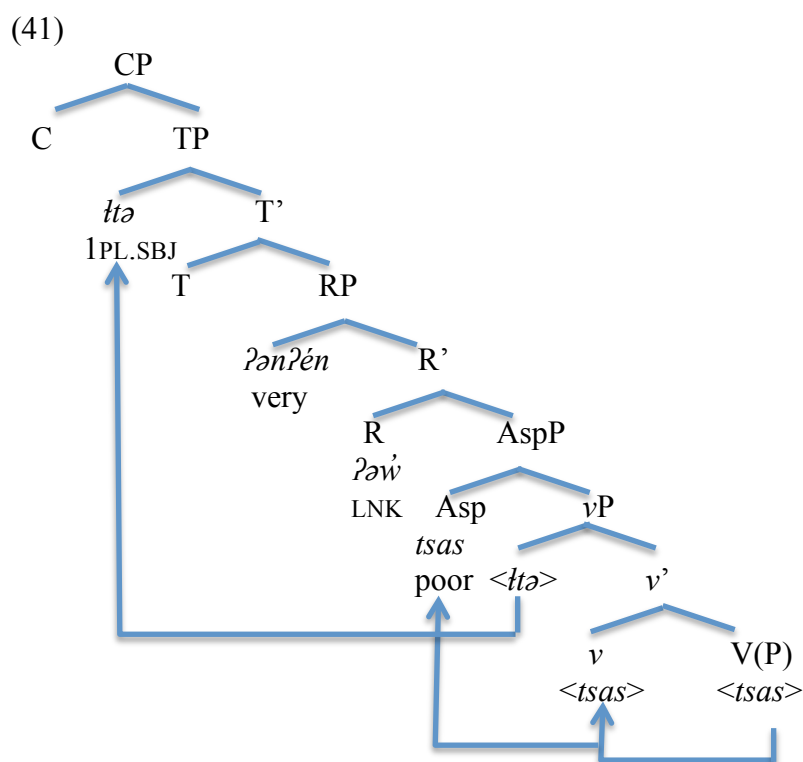
### 3.3.2 Clitic placement in clauses with IA's

In clauses with IA's, the IA is merged above the predicate, but below the base position of the 2PCs (except the subject clitics, which I assume to move from within *v*P to spec-TP). This means the IA is the highest phonological word in the clause (except when preceded by negation within the same clause). In the completed phonological structure, the IA precedes the 2PCs, which parse leftwards along with the linking particle that accompanies the IA. Below, I propose an analysis where the constraints proposed to

account for SENĆOŦEN prosodic structure, evaluating a step-by-step derivation, derive the correct placement of 2PCs.

For example, the sentence in (40) has the syntactic derivation shown in (41). In the syntax, the first person plural subject clitic precedes the IA, occurring in spec-TP.

- (40) OO, EN,ÁN, **LTE** U, TSOS (Montler, forthcoming b)  
 ʔáa, ʔənʔén=**ltə** ʔu tsás  
 ʔaa ʔən-√ʔen=**ltə** ʔəw̄ √tsas  
 oh PL-√very=**1PL.SBJ** LNK √poor  
 "Oh, we are very pitiful." [P.27.26.1]



The prosodic derivation begins with the predicate in Asp, which is the most embedded overt phonological exponent. AspP is mapped to a prosodic phrase.

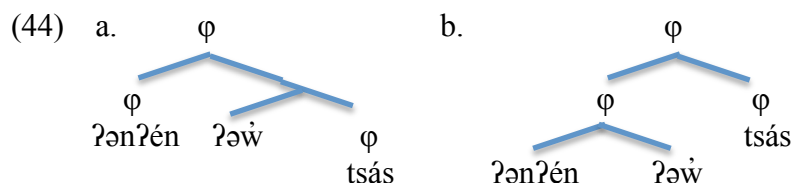
- (42) (φ (ω tsás))

ʔəw̄ is first introduced with its accompanying prosodic phrase. If it avoids a MATCH-PHRASE violation, it will phrase with the predicate (violating STRONG-START) (43a).

Alternately, the linking particle can remain unparsed till the next stage of the derivation, avoiding a violation of STRONG-START (43b).



Since the linking particle and the IA both belong to RP in the spine of the clause, MATCH-PHRASE evaluates both under a single  $\varphi$ . When the IA is introduced into the derivation, the phrasal category expands to include the prosodic phrase dominating the IA<sup>49</sup>; this satisfies MATCH-PHRASE, since both the IA and the linking particle belong to the same XP. However, this results in a structure like (44a), where the linking particle is not directly associated with any prosodic structure. Since parsing rightwards would violate STRONG-START, the linking particle parses with the preceding IA; this results in a structure like (44b).

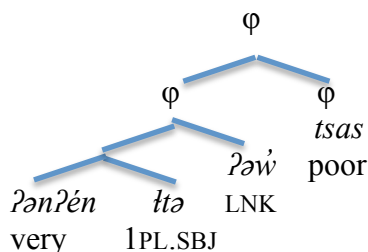


Alternately, if the linking particle remained unparsed at the previous stage of the derivation, as in (43b), it will phrase with the IA when the IA is introduced into the derivation, also resulting in a structure like (44b).

Finally, the subject clitic is added. Since the clitic does not introduce any structure and is at the edge of the phase, it can avoid a STRONG-START violation by tucking into the prosodic structure follow the IA (45).

<sup>49</sup> As a specifier, the IA is a maximal and minimal projection, and so it is parsed into a prosodic phrase.

(45)  $(\varphi (\varphi (\omega \text{ } \text{ʔənʔén}) \text{ } \text{tə} \text{ } \text{ʔəw}) (\varphi (\omega \text{ } \text{tsas})))$



### 3.3.3 Clitic placement in clauses with negation

Clauses with negation receive a similar analysis. Recall from Chapter 2 that there are two distinct negation structures, one monoclausal and one biclausal. I will deal with each of these in turn.

In monoclausal negation constructions, the negative predicate is merged above the main predicate, taking the irrealis marker as its complement. (46) is an example of this type of negation construction. The syntactic derivation of the upper phase of (46) is given in (47).<sup>50</sup>

(46) EWE JE S K̄A,ES ØS FLEKTENs  
 ʔəwə=čə s qéyəs k<sup>w</sup>s θləq<sup>w</sup>təŋ=s  
 √ʔəwə=čə s √qéyəs k<sup>w</sup>-s- √θləq<sup>w</sup>-ət-əŋ=s  
 √not=EVD IRR √recent SUB-NMLZ- √pass.through-TR-PASS-3POSS

TʔÁ,ENEN

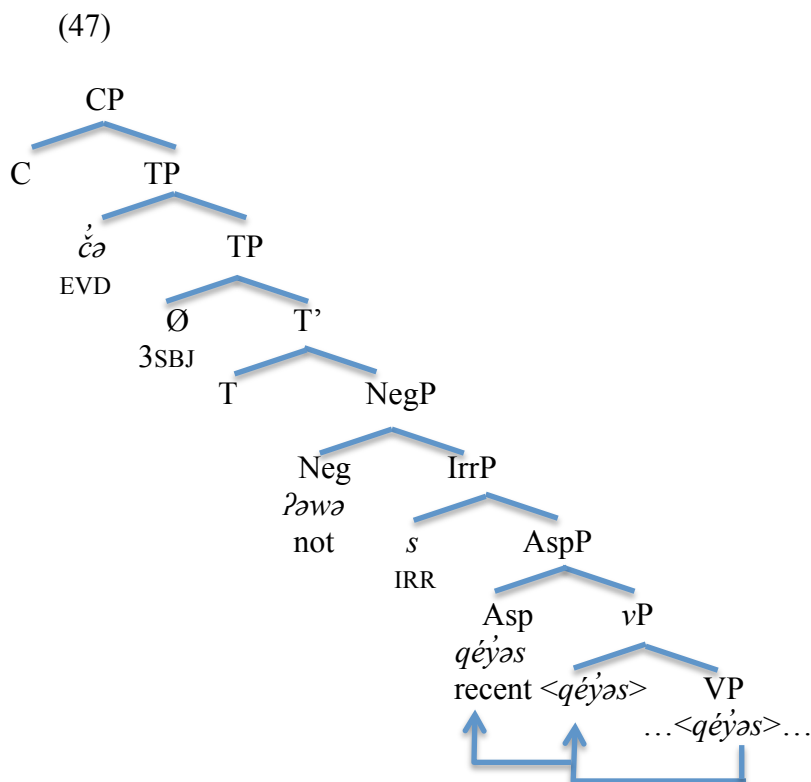
tθéʔə-nəŋ

tθeʔə-nəŋ

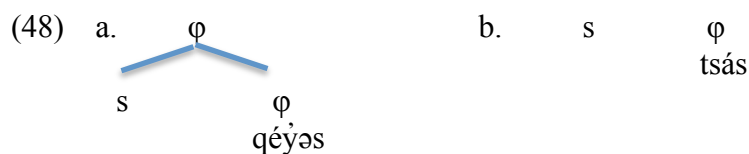
that-thing

‘It’s not brought through nowadays.’ (Montler, forthcoming b) [P.27.56.3]

<sup>50</sup> I am assuming an expletive subject in the upper clause of (47) and (52). Note that 3<sup>rd</sup> person subjects are null, so the expletive is a null morpheme.



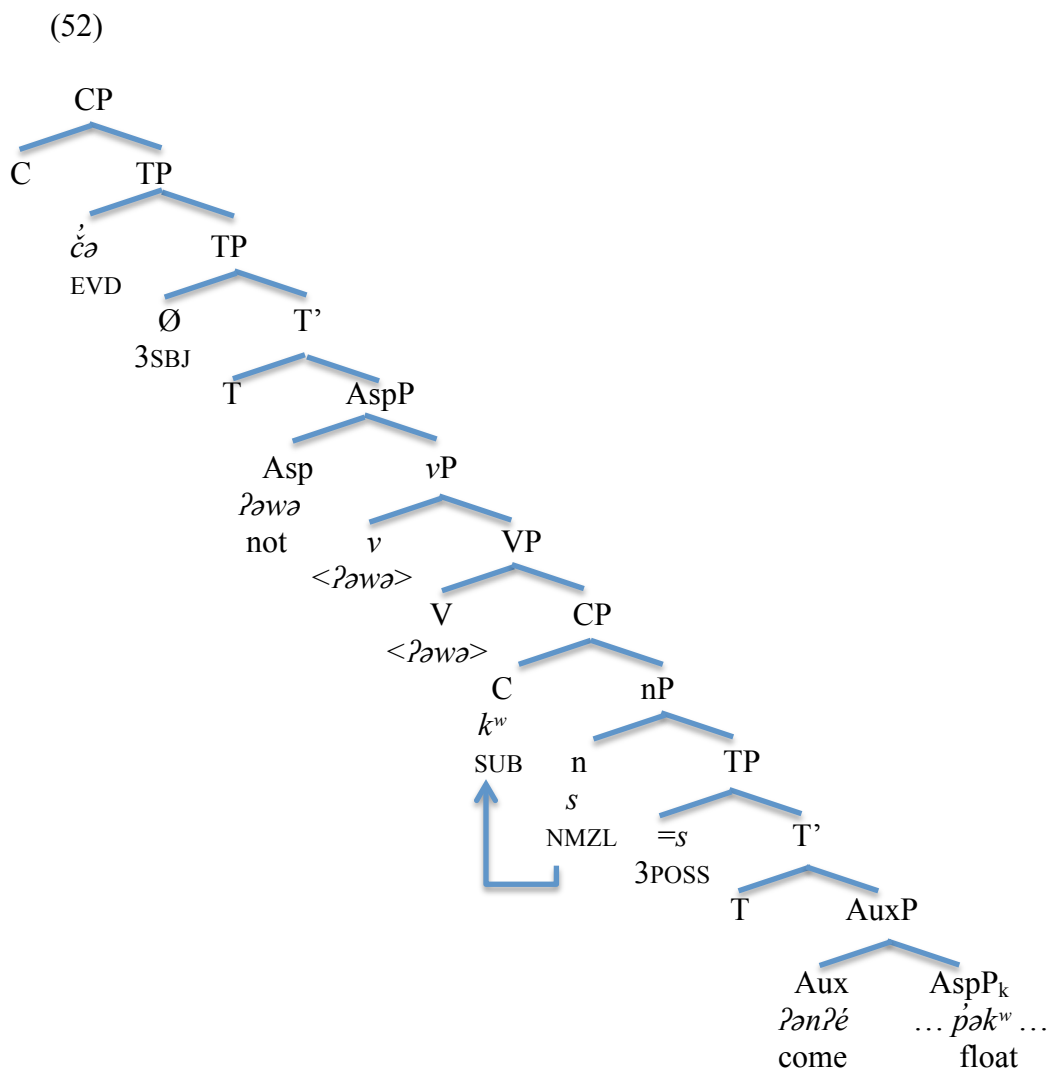
The predicate *qéy'əs* is mapped to a prosodic phrase. Next the irrealis *s* is added to the structure. As a branching function word, the irrealis *s* can either phrase with the predicate avoiding a MATCH-PHRASE violation (48a) or remain unparsed until the next stage of the derivation, avoiding a STRONG-START violation (48b).



Next, negation *ɭəwə* is added into the structure and is parsed into a prosodic phrase with the predicate.<sup>51</sup> Depending on the parsing of the irrealis marker at the previous stage of derivation, this results in either (49a) or (49b).

<sup>51</sup> Since negation is a prosodic word and its sister is a prosodic phrase, this parsing violates STRONG-START, but satisfies MATCH-PHRASE. Negation could remain unparsed at this stage to avoid a STRONG-START violation, but then at the next stage it will phrase with the predicate, since there is no category to its left to phrase with.

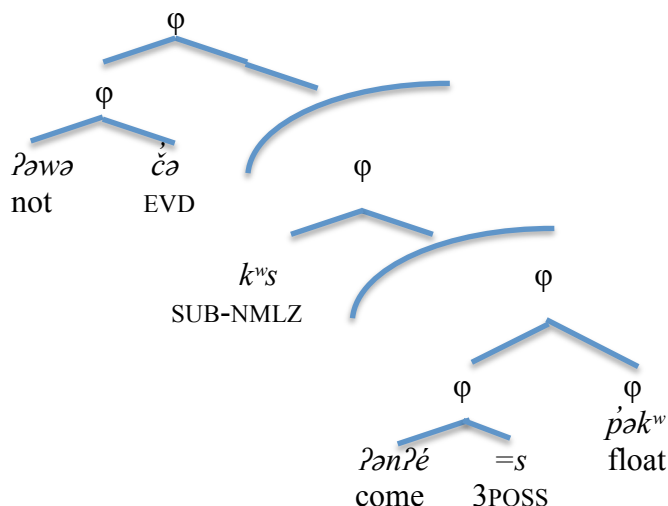




In the lower phase, the most embedded predicate *ʔəkʷ* maps to a prosodic phrase, and the preceding auxiliary *ʔənʔé* maps into a prosodic phrase with the predicate. At this stage the possessive subject is introduced into the structure; since it is a non-branching function word it will phrase with the auxiliary, avoiding a STRONG-START violation. In the upper phase the non-branching evidential clitic maps into a prosodic phrase with negation (which is functioning predicatively). This gives the structure in (53), where the curved lines represent the boundaries of Spell-Out domains.<sup>53</sup>

<sup>53</sup> Note that as a branching function word, the subordinating complementizer plus nominalizer complex head is predicted to parse variably, like determiners and oblique markers.

(53)  $(\varphi (\varphi (\omega \text{ʔəwə}) \text{čə}) (\varphi k^w s (\varphi (\varphi (\omega \text{ʔənʔé}) s) (\varphi (\omega \text{pək}^w))))))$



### 3.3.4 2PC placement in subordinate clauses

As for the placement of the third person possessive subject clitic in (52), clitic placement in conjunctive subordinate clauses follows straightforwardly from the analysis developed so far. The examples I have of conjunctive subordinate clauses have only subject clitics (e.g. (54)).

(54) AXEN ĆE EWE EW S YAY,E,  
 ʔéxəŋ k<sup>w</sup>ə ʔəwə=əx<sup>w</sup> s yéyə?  
 √ʔex-əŋ k<sup>w</sup>ə √ʔəwə=əx<sup>w</sup> s yeʔ~√ye?  
 √say-MD SUB √not=2CNJ.SBJ IRR ACT~√go  
 ‘He said you shouldn’t go.’ (EC,VW) (Montler, forthcoming a:73)

Here, Merge of the subordinating complementizer  $k^w$  triggers Spell Out of the domain of the subordinate CP phase. The highest prosodic word in the embedded clause precedes the non-branching subject clitic, satisfying STRONG-START but violating LINCORR.

Nominalized clauses, however, involve some puzzling facts regarding the ordering between morphemes. For instance, in (55a), the second person possessive subject clitic comes between the subordinating complementizer and the nominalizer  $s$ ; first person possessive clitics also occur in this position. In contrast, the third person possessive clitic

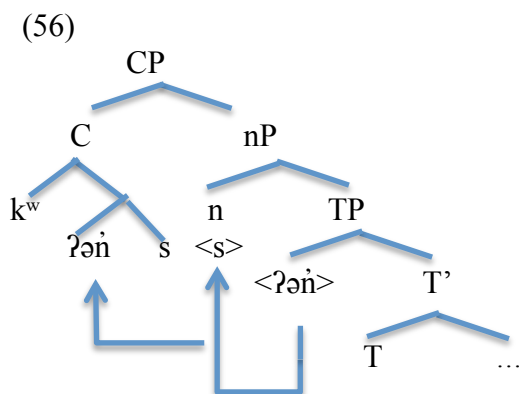
follows the highest prosodic word, which places it following both the complementizer and the nominalizer (as well as the highest prosodic word) (55b).

- (55) a. SQA ØENS TÁ, SCÁSEN.  
 skʷóy kʷ-ʔə́n-s ʔéʔ skʷésəŋ  
 s√kʷóy kʷ-ʔə́n-s √ʔéʔ √skʷes-əŋ  
 s√unable SUB-2POSS-NMLZ- √again √ask.for.marriage-MD  
 ‘You can’t go and ask for anybody anymore.’ (BJ)  
 (Montler, forthcoming a:319)

- b. AXEN LE, FE A,LES CS TÁ,s LE, U,  
 ʔéxəŋ=ləʔ θə ʔə́yləs kʷs ʔéʔ=s=ləʔ ʔu  
 √ʔéx-əŋ=ləʔ θə ʔə́yləs kʷ-s- √ʔəʔ=s=ləʔ ʔəw  
 √say-MD=PST DET Alice SUB-NMLZ- √too=3POSS=PST LNK

KO,SENSES  
 qʷáʔšənsəs  
 √qʷaʔ-šən-t-s-əs  
 √accompany-foot-TR-1S.SBJ-3SB.SBJ  
 ‘Alice said that she stood by me too.’ (CJ) (Montler, forthcoming a:7)

It could be that the first and second person possessive subject clitics head-adjoin to the nominalizer head, which then joins with the complementizer to form a single syntactic head. Such an analysis is plausible since these morphemes are pronounced as a unit; this is reflected in the orthography, where these morphemes are written together as a single word (e.g. ØENS).



However, there is no obvious motivation for this head movement, and such an account also leaves unanswered the question of why the first and second person possessive

subjects behave differently than third person possessive subjects.<sup>54</sup> Diachronically, the first and second person possessive subjects are descended from proto-Salish first and second person possessive subject proclitics, while the third person possessive subject is descended from the proto-Salish third person possessive enclitic (Davis, 1999, 2000). Whether this difference reflects different morphosyntactic features for the different pronouns or a difference in phonological distribution is a matter for future research.

### 3.3.5 Clitic placement in DPs

Recall from chapter 2, that certain 2PCs analyzed as adjuncts can occur within DPs. I assume DPs to be phases (e.g. Matushansky, 2002), proposing a parallel account of 2PC placement in DPs and clauses. (57a) shows the conjunctural clitic and the past tense clitic within the bracketed DP [<sub>DP</sub> *TTE ÇĻ HIF YEW LE, EĻTĀĻNEW*] ‘the people of long ago’. (57b) has the past tense clitic occurring in two DPs (bracketed), [<sub>DP</sub> *ÇE WI,LEM LE*] ‘the rope’ and [<sub>DP</sub> *TTE ĻKENĀ,ES LE,*] ‘the anchor’.

- (57) a. NIĻ ÇS XĀ,YOSTEN<sub>s</sub> E TTE NI, E TTE  
 niĻ k<sup>w</sup>s ɣeʔyástəŋ-s ʔə tθə níʔ ʔə tθə  
 √niĻ k<sup>w</sup>-s- √ɣəʔy-as-t-əŋ-s ʔə tθə √niʔ ʔə tθə  
 √3.focus SUB-NMLZ- √argue-RECP-TR-PASS-3POSS OBL DET √exist OBL DET
- SWIW,LES E [<sub>DP</sub> TTE ÇĻ HIF YEW LE, EĻTĀĻNEW]  
 swáwłəs ʔə [<sub>DP</sub> tθə k<sup>w</sup>Ļ-hiθ=yəx<sup>w</sup>=ləʔ ʔəltéŋəx<sup>w</sup>]  
 s-√wiwłəs ʔə tθə k<sup>w</sup>Ļ-√hiθ=yəx<sup>w</sup>=ləʔ √ʔəlt-el-ŋix<sup>w</sup>  
 s-√boy OBL DET RLZ-√long.time=CJNC=PST √person-ext-being  
 ‘It was when he was argued with by some young man of the people of long ago.’ [P.27.78.2] (Montler, forthcoming b)

<sup>54</sup> A further puzzle regards the ordering between the past tense clitic and the third person possessive clitic in (55b); the past tense clitic follows the third person possessive subject clitic, which is contrary to expectation if the past tense clitic is an adjunct to TP and the person clitic is a specifier of T (under the assumption that adjuncts occur outside specifiers). It may be that the possessive clitic occupies a different position in the clitic string than matrix clause subject clitics. I leave analysis of this phenomenon for future research.

b. ST,ÁELTEN [DP ÇE WĪ,LEM LE] TĪÁ,E I, U,  
 s-√θǵéyəl-t-əŋ [DP kʷə √xʷiləm=ləʔ] tθeʔə ʔiʔ ʔeʷ  
 NMLZ-√storage.place-TR-MD DEM rope=PST that CNJ LNK

LÁ,E JE [DP TTE ŁKENÁ,ES LE]

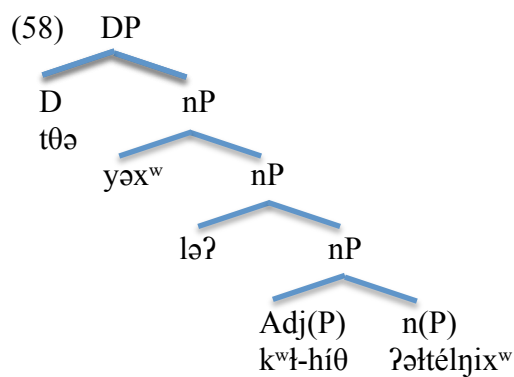
√léʔə=čə [DP tθə √tqənéʔ-əs=ləʔ]

√here=EVD DET √anchor-it=PST

‘They stored them there, those ropes. And so here, they say, was the anchor (too).’ [R.5:44] (Cienski, 2010:92)

I propose that the 2PCs are generated as left branching adjuncts below DP. In this position, the 2PC(s) are the highest phonological exponents in the Spell Out domain of the DP. In this position, they cannot parse leftwards, because there is no preceding prosodic category for them to phrase with. Since they are non-branching function words and are not associated with a prosodic phrase, they will ‘tuck in’ to the lower prosodic structure (as proposed in the previous sections to account for the placement of adjunct 2PCs in clauses), avoiding the STRONG-START violation that would be incurred if they were to parse rightwards.

The derivation is illustrated below for the DP [<sub>DP</sub> TTE ÇĪ HIF **YEW LE**, *ELTÁLNEW*] ‘the people of long ago’ from (57a). The syntactic structure, given in (58), is a rough approximation, since attributive constructions in DPs still require further research (though see Montler, 1993).



The noun is first parsed into a prosodic phrase. Next, the preceding attributive predicate or adjective is added to the structure; since it also corresponds to a syntactic X(P), it will also be parsed into a prosodic phrase, while the two prosodic phrases are in turn grouped into a higher prosodic phrase.

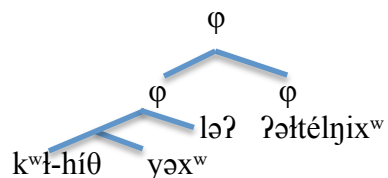
(59)  $(\varphi(\varphi(\omega k^{w1}\text{-}h\acute{i}\theta))(\varphi(\omega \text{?}\acute{\alpha}t\acute{\epsilon}l\eta\acute{i}x^{w})))$

Next, the past tense clitic is introduced into the structure, remaining unparsed in order to avoid a STRONG-START violation. This does not incur a MATCH-PHRASE violation because non-branching function words do not project a prosodic phrase under the Function Word Mapping Principle. Then, the conjectural clitic is added and also remains unparsed. However, this completes the domain of the phase and there is no prosodic category to the left of the clitics for them to phrase with.

(60)  $y\acute{\alpha}x^{w} l\acute{\alpha}?\ (\varphi(\varphi(\omega k^{w1}\text{-}h\acute{i}\theta))(\varphi(\omega \text{?}\acute{\alpha}t\acute{\epsilon}l\eta\acute{i}x^{w})))$

At this point the 2PCs ‘tuck in’ to the existing structure, avoiding violations of MATCH-PHRASE and STRONG-START, but incurring several violations of LINCORR. (61) shows the prosodic structure of the domain of the DP phase.

(61)  $(\varphi(\varphi(\omega k^{w1}\text{-}h\acute{i}\theta) y\acute{\alpha}x^{w} l\acute{\alpha}?) (\varphi(\omega \text{?}\acute{\alpha}t\acute{\epsilon}l\eta\acute{i}x^{w})))$



### 3.3.7 Ungrammatical clitic placements

An important aspect of any analysis is that it does not predict ungrammatical derivations.

In SENĆOŦEN, there are a number of conceivable clitic placement options that are not

attested; 2PCs cannot come initially in the clause, cannot be reordered (except 1<sup>st</sup> person subject clitics and tense clitics), and do not occur later than second position, except where the adjunct clitics Merge lower in the clause for reasons of semantic scope.<sup>55</sup> The clitic ‘string’ additionally cannot be interrupted. The analysis must be able to rule out these options to be fully successful.

STRONG-START prevents the clitics from coming initially in the clause, while LINCORR rules out derivations where the clitics follow more than one prosodic word. Any other clitic placement incurs additional LINCORR violations, ruling out alternate clitic placements. This is illustrated in Table 8, where *w* and *x* are non-branching function words.

**Table 8. 2PCs follow the initial prosodic word.**

$W_{\text{func}} X_{\text{func}} (\varphi (\omega Y) (\omega Z))$	STRONG-START	MATCH-PHRASE	LINCORR
$W_{\text{func}} X_{\text{func}} (\varphi (\omega Y) (\omega Z))$	*!		
$(\varphi (\omega Y) (\omega Z) W_{\text{func}} X_{\text{func}})$			***!*
$\rightarrow (\varphi (\omega Y) W_{\text{func}} X_{\text{func}} (\omega Z))$			**

For the same reason, LINCORR prevents clitic orders that do not represent the syntactic hierarchy of the clitics within the clitic string.

<sup>55</sup> These cases can involve the tense clitic following a predicate which is not the first prosodic word in the clause (e.g. example (15) in chapter 2). I assume that movement of the predicate to AspP places the predicate in a position preceding the adjoined clitic, which presumably is left-adjoined to the predicate’s base position (adjoined to *v*P or VP).

**Table 9. Linearization within the clitic string.**

$W_{\text{func}} X_{\text{func}} (\varphi (\omega Y) (\omega Z))$	STRONG-START	MATCH-PHRASE	LINCORR
$(\varphi (\omega Y) X_{\text{func}} W_{\text{func}} (\omega Z))$			***!
$\rightarrow (\varphi (\omega Y) W_{\text{func}} X_{\text{func}} (\omega Z))$			**

Likewise, the clitic string can never be interrupted by a prosodic word, since this violates both STRONG-START and LINCORR; there will still be clitics to the left of the prosodic word, violating STRONG-START and linearization is also disrupted.

**Table 10. Disruption of the clitic string.**

$W_{\text{func}} X_{\text{func}} (\varphi (\omega Y) (\omega Z))$	STRONG-START	MATCH-PHRASE	LINCORR
$W_{\text{func}} (\varphi (\omega Y) X_{\text{func}} (\omega Z))$	*!		*
$\rightarrow (\varphi (\omega Y) W_{\text{func}} X_{\text{func}} (\omega Z))$			**

The interaction of these constraints is such that only a structure where the clitics follow the initial prosodic word in the clause will be derived.

### 3.4 Alternate analyses

In this chapter, I have sketched a purely PF interface approach to the problem of second-position clitic placement. However, I have not discounted a syntactic analysis of 2PC placement, or a mixed account where the syntax usually provides the clitics with a host and the phonology provides the clitics with a host as a ‘last resort’. In fact, the available data does not allow me to entirely rule out a syntactic or mixed analysis. Instead, I will argue that an interface account is the most descriptively adequate and requires the fewest stipulations.

As Schütze (1994) points out, in order to argue for phonological placement of 2PCs, the 2PCs must appear in a position that is not derivable in the syntax and can be derived

by a phonological operation. At the same time, the phonological operation must not predict ungrammatical placement of the 2PCs. Conversely, in order to argue for a syntactic placement of 2PCs, the 2PCs must appear in a position that can be derived in the syntax, but cannot be derived by a phonological operation such as Prosodic Inversion (PI).<sup>56</sup> At the same time, syntactic operations should not predict ungrammatical 2PC placement. Additionally, if a placement is consistent with both a particular syntactic derivation and achievable by a phonological operation, the two options may be distinguished by the semantic interpretation. If the meaning is consistent with the syntactic derivation that would produce the 2PC placement, then the structure is consistent with a syntactic analysis. On the other hand, if the meaning is instead consistent with the syntactic derivation, from which the 2PC placement can be achieved by a phonological operation, the structure is consistent with a prosodic analysis.

In languages such as Serbo-Croatian, 2PC placement has been argued to take place by both syntactic and phonological means (e.g. Halpern 1992; Percus 1993; Schütze 1994). The clitics can follow the initial syntactic constituent of the clause, regardless of its prosodic size. For instance, the 2PCs may follow a subject DP that consists of a demonstrative and a noun, both prosodic words (62a). This placement cannot be derived by a phonological operation like PI, since PI is a post-syntactic phonological rule that does not make reference to syntactic structure, but inverts the clitics with the closest prosodic word, regardless of whether the word is part of a larger syntactic constituent.

- (62) a. Taj pesnik=mi=je napisao knjigu. (Schütze 1994:5)  
           that poet=me=aux written book  
           ‘That poet wrote me a book.’

---

<sup>56</sup> Recall from the introduction that prosodic inversion inverts clitics with the closest available prosodic word in cases where the syntax fails to provide the clitics with a host

- b. Taj=mi=je pesnik napisao knjigu.  
that=me=aux poet written book

On the other hand, the clitic may follow only the first prosodic word, the demonstrative (62b). Because of the freedom of word order in the language, most clitic placements, including (62b), are in principle achievable by syntactic fronting of a syntactic (sub)constituent to a position preceding the clitics. However, there are a limited number of constructions where the clitics appear interrupting a syntactic constituent to follow the initial word where this position is not allowed for any other material. For instance, a prepositional phrase may be interrupted, but the interruption must follow any modifiers preceding the noun (63a-b). However, a 2PC may appear following the initial prosodic word, preceding a modifier (63c). In this case, the host is straightforwardly defined as a prosodic constituent, a prosodic word, but not straightforwardly defined as a syntactic constituent. The placement does not appear to be derivable by syntactic means, but is achievable by PI.

- (63) a. U veliku Jovan ulazi sobu. (Schütze 1994:28-9)  
in big Jovan enters room  
'Jovan enters (the) big room.'  
b. \*U ovu Jovan ulazi veliku sobu.  
in this Jovan enters big room  
'Jovan enters this big room.'  
c. U ovu je veliku sobu Jovan ušao.  
in this=aux big room Jovan entered  
'Jovan entered (the) big room.'

In SENĆOFEN, either a syntactic or a prosodic account is possible, but a syntactic account is more difficult to motivate and less descriptively adequate. In principle, syntactic movement could derive 2PC placement either by head-movement of the host to C or phrasal movement of the host to spec-CP (or adjunction to CP). In what follows, I

will argue that a syntactic phrasal movement analysis is untenable because the host does not seem to be a phrasal constituent (phrasal movement predicts unattested structures) and movement to spec-CP predicts semantic effects that are not consistent with the facts. Although it is not possible to entirely rule out an analysis where the clitics' host undergoes head-movement to C, I will argue against a head-movement analysis, since there is no obvious motivation for head-movement to C and a head-movement analysis requires some stipulation when it comes to embedded clauses. I will first discuss a phrasal movement account, since this is the easiest to refute.

### 3.4.1 Phrasal movement of the 2PCs' host

Phrasal movement moves XPs, which can contain modifiers, as well as heads.

However, in SENĆOŦEN, 2PCs never follow a modifier plus head sequence; instead, 2PCs follow an initial modifier, while the modified head follows the clitics. For instance, it is not possible to front a modified predicate along with an IA. In (64a), only *EN,ÁN/ʔənʔén* 'very' fronts, leaving behind the linking particle associated with it *U,/əw*, as well as the modified predicate *TSOS/tsás* 'poor'. (64b-c) are from the Lummi dialect of Northern Straits; here, the adjectival predicate precedes the second-person subject 2PC, while the nominal predicate it modifies must follow the 2PC.

- (64) a. OO, EN,ÁN, **LTE**      U, TSOS      (Montler, forthcoming b)  
       ʔáa, ʔənʔén=**Itə**      ʔu tsás  
       ʔaa ʔən-√ʔen=**Itə**      ʔəw √tsas  
       oh PL-√very=**1PL.SBJ** LNK √poor  
       "Oh, we are very pitiful."      [P.27.26.1]
- b. ʔəy=sx<sup>w</sup> sweyqəʔ      (Jelinek 1995:523-4)  
    good=2SBJ male  
    'You are a good male.'      [Lummi]
- c. \*ʔəy sweyqəʔ=sx<sup>w</sup>  
    good male=2SBJ

If the host is undergoing phrasal movement, we would also expect it to be possible to front conjoined vPs as a constituent. However, this does not seem to be the case. The clitics always follow the initial prosodic word of a coordinate predicate structure (65).<sup>57</sup>

- (65) a. EN,Á SEN I, YÁ, (Montler, forthcoming a:84)  
 √ʔənʔé=sən ʔiʔ √yéʔ  
 √come=**1S.SBJ** CNJ √go  
 ‘I come and go.’ (EC, VW)
- b. ÇÁ,ETENs JE I, NEWŁKEWÁCTEN  
 k<sup>w</sup>éʔətəŋ-s=čə, ʔiʔ nəx<sup>w</sup>lq<sup>w</sup>əwéčtəŋ  
 √k<sup>w</sup>e-ət-əŋ-s=čə ʔiʔ nəx<sup>w</sup>-√lq<sup>w</sup>=əwəč-ət-əŋ  
 √release-TR-PASS-3POSS=**EVD** CNJ LOC-√slap-bottom-TR-PASS  
 ‘He released him and slapped him on the bottom.’  
 [P.27.16.1] (Montler, forthcoming b)

The clitics also come after the first prosodic word within a complex number (66).<sup>58</sup>

While the coordinated constituents are not of the same syntactic type in this case, they are functioning together semantically as the predicate (cf. English ‘I’m already on the road and driving away.’).

- (66) ÇĹ OPEN SEN I, ÇSE ŁKÁĆES  
 k<sup>w</sup>l-ʔápən=sən ʔiʔ k<sup>w</sup>sə lq<sup>é</sup>čəs.  
 RLZ-ten=**1SBJ** CNJ DET five  
 ‘I’m fifteen.’ (Montler, forthcoming a:84)

What seems clear from these examples is that the clitics’ host is more straightforwardly defined as a prosodic unit, a prosodic word, than as a syntactic XP.

The examples in (65) and (66) are also significant in that the clitics appear to interrupt a syntactic constituent, the conjoined predicate. Since the clitics appear between two subparts which are themselves constituents, the structure is in principle still derivable by

<sup>57</sup> (65) could actually involve clausal coordination, with the subject in the first conjunct binding a null PRO in the second, as pointed out in Davis (2005).

<sup>58</sup> The *I,ʔiʔ* conjunction can be used as a comitative conjunction (Montler, forthcoming a), so (64) might be more literally translated as ‘I’m ten with five’.



- (68) A: Stéʔ x<sup>w</sup>úy̌ k s-laʔxáns-əp tk ʂʔáp. (Koch, 2008:55)  
 what FUT IRR NMLZ-eat-2PL.POSS OBL.IRR evening  
 ‘What are you people going to eat this evening?’
- B: [pínʂ ]<sub>FOC</sub> nceʔ x<sup>w</sup>úy̌ e n-s-laʔxáns  
 bean 1S.EMPH FUT DET 1SG.POSS-NMLZ-eat  
 ‘I’m gonna’ eat [beans]<sub>FOC</sub>.’

However, the focused constituent may also be introduced by a clefting predicate *cé*. In this case, focus is not associated with the predicate itself, but with the following DP. This construction is illustrated in (69), where the answer to speaker A’s question is introduced by the clefting predicate in speaker B’s reply.

- (69) A: swét xeʔ k wík-t-x<sup>w</sup> (Koch, 2008:56)  
 who DEM IRR see-TR-2S.TSBJ  
 ‘Who did you see?’
- B: cé xeʔ [e Moníque]<sub>FOC</sub> e wík-t-ne.  
 CLEFT DEM DET Monique DET see-TR-1S.TSBJ  
 ‘I saw [Monique]<sub>FOC</sub>.’ (literally “It was [Monique]<sub>FOC</sub> that I saw.”)

SENĆOFEN has a similar clefting construction to the one in (69), where the focused constituent is introduced by the predicate *NIĒ/nít* ‘it is’. For instance, in (70), *NIĒ/nít* introduces the focused constituent *ÇTE NE TÁN/ k<sup>w</sup>θə nətén* ‘my mother’. Nevertheless, the unfocused predicate, *NIĒ/nít*, still hosts 2PCs (*YEW/yəx<sup>w</sup>* ‘conjunctural’ in (70)), so focus movement does not seem a plausible explanation for the position of the clitics’ host.

- (70) NIĒ YEW ÇTE NE TÁN (Montler, 1986:8)  
 √nít=yəx<sup>w</sup> k<sup>w</sup>θə nə-√tén  
 √3focus=CNJC INV.F.DET 1POSS-√mother  
 ‘It must be my mother.’

Moreover, in many cases, the choice of the clitics’ host does not seem to be governed by which element is focused, but rather by which element is the highest in the syntactic

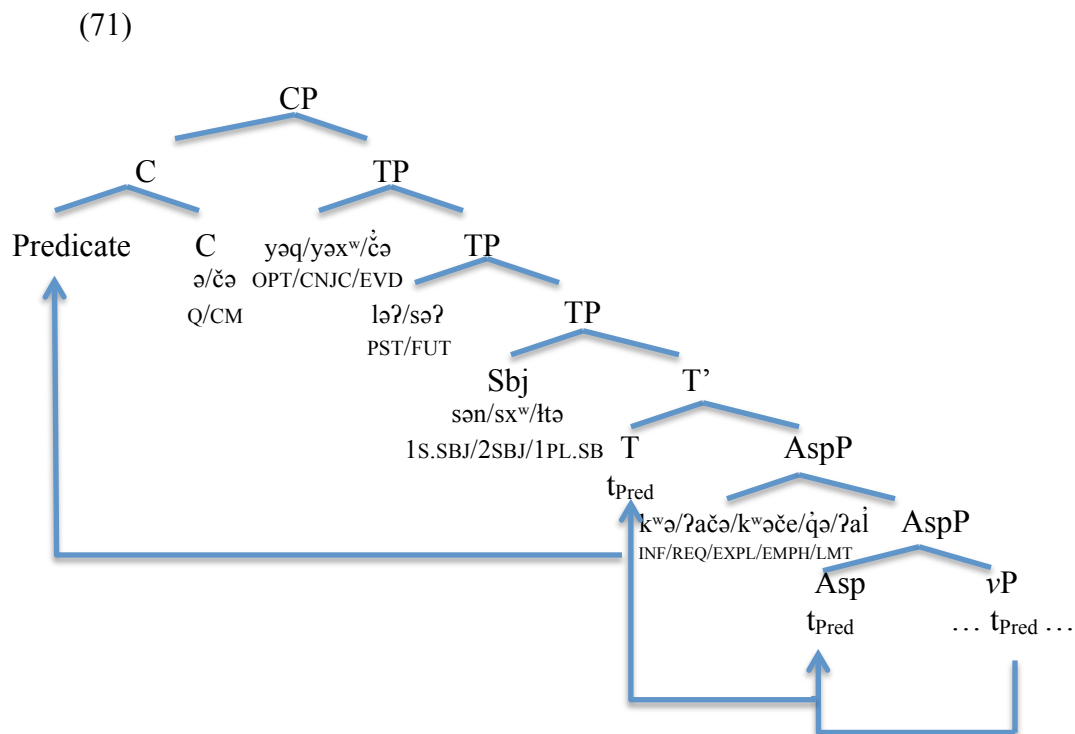
structure, as discussed in chapter 2. That is, if negation or an IA is present in the clause, this item will host the 2PCs because it is merged above the predicate.

Given the evidence discussed above, I conclude that phrasal movement is not a plausible candidate for deriving the relative position of the 2PCs and their host. Moreover, 2PCs in SENĆOŦEN are never preceded by a phrasal category, even where this would be a plausible option, as in the case of modified predicates. 2PCs occur between conjoined predicates, which would not be expected if a phrasal (multi-word) constituent could precede the 2PCs and suggests that clitic placement is not sensitive to syntactic constituency. The placement of the clitics' host is also not associated with any consistent semantic effect, such as focus, as might be expected if the host were undergoing syntactic phrasal movement.

### **3.4.2 Head movement of the 2PCs' host**

A head movement account is more plausible than a phrasal movement account. To propose such an account, one could hypothesize that all the clitics' possible hosts, although morphosyntactically diverse, belong to some syntactic class 'predicate' that undergoes head-movement up to C (adjoining to the left of any clitics in C). For instance, though the closed class of IA's are likely functional items, they could still group together with lexical items functioning predicatively, just as auxiliaries in French, which, though functional items, belong to the same class as lexical verbs, bearing Tense and Agreement, and undergoing head-movement to T (Pollock, 1989). Given the syntactic structure I have proposed, the lower clitics would not block head movement under the Head Movement Constraint (Travis, 1984), since I have argued that they are either adjuncts or, in the case

of the subject clitics, specifiers.<sup>60</sup> Since I have argued that T is null, the initial step of movement would have no overt morphological effect. The hypothesized movement is shown in (71).



### 3.4.2.1 Arguments against a head movement analysis

Analyzing all possible clitic hosts as belonging to the same syntactic class may not be on the right track, however. Several of the IA's cannot function independently as predicates, as discussed in chapter 2, which could indicate that they should not be grouped into the same syntactic class as predicates, but rather regarded as adverbs. If these are adverbs, a head movement account is more difficult to motivate, since it would involve syntactic constituents of different classes (predicates and adverbs) moving to the same heads, T and C. A head movement account also runs into complications in subordinate clauses, since the host does not adjoin to C in these clauses, instead following

<sup>60</sup> The Head Movement Constraint prevents head movement from skipping intervening heads.

the subordinating complementizer  $\mathcal{C}/k^w$  (and the nominalizer  $S/s$  in nominalized subordinate clauses).

- (72) a. AXEN<sub>N</sub> LE, FE A,LES  $\mathcal{C}$ S                      TÁ,s LE,                      U,  
 ʔéxəŋ=ləʔ    θə ʔóyləs k<sup>w</sup>s                      ʔéʔ=s=ləʔ                      ʔu  
 √ʔéx-əŋ=ləʔ    θə ʔóyləs k<sup>w</sup>-s-                      √ʔéʔ=s=ləʔ                      ʔəw̄  
 √say-MD=PST DET Alice    SUB-NMLZ-    √too=3POSS=PST                      LNK

KO,ŠENSES

q̣<sup>w</sup>áʔšənsəs

√q̣<sup>w</sup>aʔ-šən-t-s-əs

√accompany-foot-TR-1S.SBJ-3SB.SBJ

‘Alice said that she stood by me too.’ (CJ)                      (Montler, forthcoming a:7)

- b. NIĒ JE LE,                      U,    ŠXEN,ÁN,s  
 níŋ=čə=ləʔ                      uʔ    š-x<sup>w</sup>ənʔéŋ-s  
 √níŋ=čə=ləʔ                      ʔəw̄    š-√x<sup>w</sup>ən<ʔ>e-əŋ<ʔ>-s  
 √3.focus=EVD=PST LNK    for-way<NACT>-MD<NACT>-3POSS

CSU,

k<sup>w</sup>suʔ

k<sup>w</sup>-s-w̄-

SUB-NMLZ-CONTR

SWCÁKEĒs,JE LE,

sx<sup>w</sup>k<sup>w</sup>éq̣ət-s=čə=ləʔ

s-x<sup>w</sup>-√k<sup>w</sup><é>q̣-ət-s=čə=ləʔ

STAT-LOC-√open<RES>-DUR-3POSS=EVD=PST

CSÁ,ENEN STÁLEKEM JE LE,

k<sup>w</sup>səʔənəŋ    sʔéleqəm=čə=ləʔ

k<sup>w</sup>səʔənəŋ    s-√ʔéleqəm=čə=ləʔ

that                      s-√monster=EVD=PST

‘That’s how the monster was when it was open.’

[P.27.72.3]                      (Montler, forthcoming b)

Under a head movement account, the host could be moving to a lower position, perhaps T, in subordinate clauses, blocked from moving to C, possibly by the overt realization of C.<sup>61</sup> In this case, the host should not precede tense and modality clitics (adjoined to T) in subordinate clauses, contrary to fact (72). This is not an insurmountable objection. The host could move to T, and the clitics could be subcategorized for a host to their left,

<sup>61</sup> However, the host can precede an overt question or command 2PC in C in matrix clauses, so it is not obvious why an overt morpheme in C would block movement of the host in subordinate clauses.

causing them to be linearized to the right of the host (McGinnis, personal communication).

Alternately, the host could move further than T, to the nominalizer head, where it would precede Tense and Modality clitics. However, the nominalizer *S/s* tends to be pronounced as a unit with the complementizer (e.g. *CS/kʷs*) and the first and second person possessive subject clitics, when present (e.g. *CENS/kʷənʰs* with the second person possessive subject and *CNES/kʷnəs* with the first person possessive subject clitic), rather than as a prefix on the host. This is problematic for an account where the predicate moves to the nominalizer head, which would predict that the nominalizer attaches to the host (unless the nominalizer subsequently excorporates, and moves to C).<sup>62</sup> In addition, conjunctive subordinate clauses do not occur with a nominalizing head. In these cases, we could stipulate a null head below the complementizer and above T, so that the host could move to a position preceding the conjunctive subject clitics (e.g. (71)).

- (73) AXEN CE EWE EW S YAY,E,  
 ʔéχəŋ kʷə ʔəwə=əxʷ s yéyəʔ  
 √ʔex-əŋ kʷə √ʔəwə=əxʷ s yeʔ~√yeʔ  
 √say-MD SUB √not=2CNJ.SBJ IRR ACT~√go  
 ‘He said you shouldn’t go.’ (EC,VW) (Montler, forthcoming a:73)

However, this is not a desirable move without independent evidence for such a head. An alternate possibility is that the host is moving to a recursive C, as postulated for V2 in embedded Icelandic clauses (e.g. Vikner, 1994). However, this would require analysis where the host moved to a recursive C in clauses without a nominalizer head and to a position below the nominalizer (which is in turn below C) in clauses with a nominalizer

<sup>62</sup> Note that this is also a problem for an analysis where the predicate right adjoins to the nominalizer (or C in subordinate clauses without a nominalizer) since the nominalizer does not attach to the predicate. Of course, right adjunction does achieve the correct order of the morphemes and surface level phonology could derive the correct pronunciation. In order to argue for such an approach, one would have to motivate surface level phonological processes that would create this mismatch between the syntax and phonology.

head. Again, this does not disprove a head-movement analysis, but this approach misses the generalization that the clitics always follow the highest prosodic word in the Spell-Out domain of a phase, and, instead, is forced to stipulate a variety of landing sites for the 2PC's host for which there is no obvious independent evidence.

In summary, I argue that a head-movement analysis, while possible, is less descriptively adequate than a prosodic account. A head movement analysis must stipulate different landing sites for the host in matrix and different types of subordinate clauses. In addition, it is not clear that all possible 2PC hosts belong to the same class and could undergo head movement to the same syntactic heads. Head movement also does not have any independent motivation, since it does not have any overt morphological effect on the 2PCs' host. In the absence of clear motivation to adopt a head movement analysis, a prosodic account, which receives independent motivation from patterns of prosodic phrasing and makes strong predictions about the types of environments in which 2PCs will occur, is preferable.

#### **3.4.2.2 Extension: VP-ellipsis in St'at'imcets**

The hypothesis that 2PC placement in Salish occurs during P-computation, rather than as a result of head movement, receives additional support from research investigating the interior Salish language St'at'imcets (Lillooet). Davis (2013) argues that there is no V to T movement in St'at'imcets, based on evidence from verb phrase ellipsis. VP-ellipsis in St'at'imcets is similar to VP ellipsis in English; in both languages, ellipsis must be licensed by an auxiliary. For instance, in (74b), the auxiliary *have* licenses ellipsis of the main verb and direct object. Assuming a syntactic analysis of ellipsis resolution (e.g. Williams 1977; Fiengo & May 1994; Merchant, 2015), the ellipsis is resolved by copying

the VP of the preceding clause to the empty VP of the second clause at LF. VP ellipsis cannot be licensed by the main verb in English: English does not have V-to-T movement, so the main verb does not move out of the ellipsis site (75).

- (74) a. Have you finished your homework?  
b. Yes, I *have*.
- (75) a. Did she send the letter?  
b. \*Yes, she sent.

In contrast, Irish has V-to-T movement of the main verb, and the main verb does license VP ellipsis (McCloskey, 1991). This is illustrated in (76) and (77), where the main verb licenses ellipsis of the subject and direct object, both within *vP*. The subject is argued not raise to T in Irish, so that the subject and object form a constituent apart from the raised verb (McCloskey 1991).

- (76) Dúirt mé go gceannoinn é agus cheannaigh (McCloskey 1991:273-4)  
said I COMP buy [CONDIT: s1] it and bought  
'I said that I would buy it and I did.'
- (77) A: Ar cheannaigh siad teach?  
INTERR.COMP buy.PST they house  
'Did they buy a house?'  
B: Creidim gur cheannaigh  
I-believe COMP.PST buy.PST  
'I believe they did.'

The main verb is also argued to license ellipsis in Hebrew (e.g. Doron, 1999; Goldberg, 2005).

- (78) a. Q: Salaxt etmol et ha-yeladim le-beit-ha-sefer (Doron 1999:129)  
Q: you-sent yesterday ACC the kids to school  
'Did you send the kids to school yesterday?'  
b. A: Salaxti  
A: I-sent  
'I did.'

Davis (2013) argues that VP-ellipsis in St'at'imcets operates like VP-ellipsis in English; it is licensed by an auxiliary that occurs above the ellipsis site, *plán* 'already' in (79b). Davis suggests that the auxiliary occurs in an AuxP above vP.

- (79) a. *plán=lhkacw=ha tsukw-s-Ø ta=s-7álkst-sw=a* (Davis, 2013:30)  
 already=2S.SBJ=Q finish-CAUSE-3OBJ-DET=NMLZ-work-2S.POSS=EXIS  
 'Have you already finished your work?'  
 b. *iy, plán=lhkan*  
 yes already=1S.SBJ  
 'Yes, I already have.'

In St'at'imcets, the interpretation of a single overt DP distinguishes between clauses with VP ellipsis and clauses where VP ellipsis does not occur. A single overt DP is always interpreted as the object in a transitive clause with two third person arguments, a phenomenon known as the 'One Nominal Interpretation' effect (Gerds, 1988). This is illustrated in the second conjunct of (80), where the single overt DP is interpreted as the object, despite the pragmatic implausibility.<sup>63</sup>

- (80) *plan cwík'-en-Ø-as ti=sts'úqwaz'=a k=Lémya7,*  
 already butcher-DIR-3OBJ-3ERG DET=fish=EXIS DET=Lémya7(proper name)  
  
*múta7 plan t'it cwík'-en-Ø-as ti=skícza7-s=a*  
 and already also butcher-DIR-3OBJ-3ERG DET=mother-3POSS=EXIS  
 !! 'Lémya7 has already butchered a fish, and has already butchered her mother  
 too.' (laughter) (Davis, 2013:36)

Under VP ellipsis, however, this effect does not hold; the single overt DP in the second conjunct in (81) may be interpreted as the subject, presumably because the object DP is also present (just as in the first conjunct), but within the elided VP.

<sup>63</sup> McGinnis (personal communication) points out that it could be pragmatically implausible for the fish to be the object in the second conjunct if this forces an interpretation where the same fish is butchered by Lémya7 and her mother. This depends on how pronoun-antecedent relationships are interpreted and whether the verb for butcher is an activity or accomplishment. If it is an accomplishment and the pronoun is interpreted as referring to the same entity in both conjuncts, then (80) might give rise to a contradiction where Lémya7 and her mother both completely cut up the same fish. If the verb is an activity, then presumably Lémya7 and her mother could each take a turn at butchering the same fish.

- (81) plan cwík'-en-Ø-as ti=sts'úqwaz'=a k=Lémya7,  
 already butcher-DIR-3OBJ-3ERG DET=fish=EXIS DET=Lémya7
- múta7 plan t'it ti=skícza7-s=a  
 and already also DET=mother-3POSS=EXIS  
 'Lémya7 has already butchered a fish, and her mother has too.'  
 (Davis, 2013:37)

Davis points out that if the predicate could move out of the verb phrase to T, it should be possible to get VP ellipsis in clauses without an auxiliary, just as in Irish and Hebrew; the predicate would move to T and the remnant VP, including any DP objects would elide. Any overt DP remaining after ellipsis had taken place would be interpreted as the subject, just as in (79). This is not the case. In the second conjunct of (80), the single overt DP argument *ti=skícza7-s=a* 'her mother' is interpreted as the object, indicating that VP-ellipsis has not taken place (and is unavailable, even to rescue the pragmatically odd interpretation).

- (82) (plan) cwík'-en-Ø-as ti=sts'úqwaz'=a k=Lémya7,  
 (already) butcher-DIR-3OBJ-3ERG DET=fish=EXIS DET=Lémya7
- múta7 cwík'-en-Ø-as ti=skícza7-s=a  
 and butcher-DIR-3OBJ-3ERG DET=mother-3POSS=EXIS  
 '!!Lémya7 has (already) butchered a fish, and her mother too.'  
 (Davis, 2013:37)

Davis concludes that the main predicate does not move to T and therefore cannot license VP ellipsis, unlike auxiliaries, which occur above the VP, licensing VP ellipsis.<sup>64</sup>

<sup>64</sup> Davis (2013:42) specifically argues, based on VP ellipsis, that the predicate moves to *v*, but not higher. In St'at'imcets, a full (nonpronominal) subject DP can appear between an auxiliary and the main predicate; Davis (2013:22, fn 11) proposes that a full DP subject can occupy a right or left-branching specifier. Following the predicate, the DP subject occupies a right-branching specifier of *v*, while occurring between an auxiliary and the main predicate, it occurs in a left-branching specifier (AuxP is above *v*P, putting the auxiliary in a position preceding the subject (and the predicate)).

In SENĆOFEN, a full subject DP seems to follow both any auxiliaries and the main predicate, suggesting that the predicate may move higher in SENĆOFEN than St'at'imcets (e.g. to Asp), though this requires further investigation.

Nevertheless, 2PCs, including mood and modal clitics, can follow the main predicate in St'at'imcets, just as in SENĆOŦEN.

- (83) a. nas-tum'c=**kácw=ha**      áta7      táokth=a (Davis, 2013:13)  
       go-CAUS-2S.OBJ=**2S.SBJ=Q** to.there doctor=EXIS  
       ‘Are you taking me to the doctor?’
- b. ts'aqw-an'-ás=k'a    i      ts'wán-a                      kw s-John  
       eat-DIR-3ERG=INFER DET.PL wind-dried.salmon-EXIS DET NOM-John  
       ‘John must have eaten the *ts'wan*.’  
       (Matthewson, Davis & Rullman, 2007:9)

If the predicate could move to precede the clitics in the syntax, the evidence would seem contradictory: the verb moves to C, preceding the clitics, yet cannot move out of the VP, licensing ellipsis of the VP remnant. However, if the linear order of the predicate and the clitics is derived at the PF interface, there is no contradiction. In the syntax, the predicate does not move out of the VP. Post-syntactically, during P-computation the 2PCs invert with the highest possible host, either an auxiliary or the main predicate.<sup>65</sup>

### 3.5 Conclusion

2PCs have received extensive attention in the generative literature because their distribution is sensitive to both syntactic and phonological factors. In languages such as Serbo-Croatian and Warlpiri, 2PCs' host can be a syntactic constituent, fronted by syntactic movement to a position preceding the clitics, yet the requirement for a host is a phonological requirement, as is the requirement that the host be minimally a prosodic word (e.g. Schütze 1994, Legate 2008). This has raised numerous questions about the relationship between the syntactic and phonological components of the grammar (Schütze 1994). Does the syntax have access to the phonological representation? Can the

<sup>65</sup> Inversion of the predicate and 2PCs does not license VP-ellipsis, because this inversion takes place during P-computation, which feeds PF, but not LF, where ellipsis resolution takes place (see above).

phonology produce alterations in word order to produce a well-formed phonological structure if the syntax fails to provide the clitics with a host? If so, what limits such reordering, so that pronunciation is not completely random? Are the syntax and phonology really separate components of the grammar?

Within Match Theory (Selkirk 2009, 2011), the syntax maps directly to prosodic structure through a set of correspondence constraints. Besides allowing prosodic structure to more directly reflect syntactic structure, this model provides the theoretical tools to make precise predictions concerning how syntactic structure will map to prosodic structure. With these developments, a rescue operation like PI is not a satisfying solution to mismatches between syntactic and prosodic structure; any phonological operation deriving 2PC placement should operate within the larger system for mapping between syntax and prosodic structure.

In this chapter, I have argued that 2PC placement in SENĆOTEN occurs during P-computation, motivated by constraints governing the construction of prosodic structure. Since 2PC placement takes place within the general system of mapping to prosodic structure, limitations on phonological operations do not have to be stipulated. Unexpected linearizations will only occur if they are motivated by a Markedness constraint, such as STRONG-START, that is ranked higher than the constraint governing linearization, LINCORR. Within the derivational model I have adopted (following López 2009) unexpected linearizations are further restricted to edges of Spell-Out domains, where it is impossible for prosodically ‘light’ material to phrase with a preceding prosodic constituent.

In this chapter, I also propose an alteration to Elfner's (2012) account of the mapping of function words. In Elfner 2012, branching and non-branching function words share the same prosodic structure. In order to account for asymmetries between the prosodic behaviour of branching function words, like pronouns and determiners, and non-branching function words, like the subject and adjunct clitics, I propose that branching and non-branching function words do not map to prosodic structure in the same way: the phrasal node of branching function words maps to a prosodic category that is recursive on the prosodic category it dominates, whereas a non-branching function word does not introduce prosodic structure into the derivation. Differences in the prosodic behaviour of branching and non-branching function words are also found in Connemara Irish, so the distinction proposed here may also help to account for certain puzzles identified in Elfner (2012) regarding asymmetries in the behaviour of function words. I take this up in the next chapter.

## Chapter 4

### Discussion

In order to account for 2PC placement in SENĆOFEN, I have developed an analysis where 2PC placement occurs during P-computation, as a result of constraints governing the mapping between syntax and prosody. Following López (2009) and Elfner (2012), I have proposed that linearization is determined by a constraint LIN-CORR, ranked below STRONG-START in SENĆOFEN. This ranking means that it is possible to derive linearizations that do not directly reflect the syntactic structure in order to avoid a violation of STRONG-START. However, linearization violations are only incurred at the edge of a Spell-Out domain by function words which are sufficiently prosodically deficient to avoid a MATCH-PHRASE violation; within a Spell-Out domain, function words can phrase with a preceding prosodic category in order to avoid a STRONG-START violation, an option that also avoids a linearization violation.

This analysis predicts that prosodically driven linearization violations will only occur where a phonological markedness constraint like STRONG-START is ranked above LIN-CORR. Where linearization violations are motivated by STRONG-START, the analysis also predicts these linearization violations to occur at phase edges. The analysis therefore predicts interactions between prosodic phrasing and linearization at the edge of the  $\nu$ P phase, as well as at the edge of the CP phase. In this chapter, I will discuss some likely candidates and also briefly explore how this analysis could apply to derive phonologically driven 2PC placement in other languages.

In section 4.1 and 4.2, I discuss several examples of prosodically driven linearization violations that occur at the edge of the  $\nu$ P phase, pronoun post-posing in Connemara Irish

in section 4.1 and auxiliary placement in Eastern Armenian in section 4.2. In section 4.1, I also discuss how the alteration I propose to Elfner's (2012) analysis of function words might help account for the contrasting behaviour of branching and non-branching function words in Connemara Irish. In section 4.3, I discuss how this analysis can apply to cases of prosodically driven linearization violations at the edge of the CP phase in Serbo-Croatian and Warlpiri. Section 4.4 involves a brief discussion of the language typology predicted by different rankings of the constraints proposed here.

#### 4.1 Pronoun post-posing in Connemara Irish

Elfner (2012) discusses a case of pronoun post-posing that seems a likely example of a linearization violation at the edge of the  $vP$  Spell-Out domain. In Connemara Irish, a non-pronominal direct object DP precedes adverbs, prepositional adjuncts and goal PPs (e.g. (1a)). In this position, it comes initially in the Spell-Out domain of the  $vP$  phase. In contrast, a pronominal direct object DP can follow one or more adjuncts (1b-c), though it is generally placed after the first adjunct.

- (1) a. Bhris sé an chathaoir leis an ord aréir.  
       broke he the chair with the hammer last-night  
       ‘He broke the chair with the hammer last night.’  
       b. Bhris sé leis an ord í aréir.  
       broke he with the hammer it.FEM last-night  
       ‘He broke the chair with the hammer last night.’  
       c. Bhris sé leis an ord aréir í.  
       broke he with the hammer last-night it.FEM  
       ‘He broke it with the hammer last night.’  
       (Elfner 2012:222, from Ó Siadhail 1989: 7-8)

Elfner (2012) argues that pronoun post-posing is a prosodic process, since it only targets weak pronouns and seems largely without discourse or pragmatic effects. Moreover, it cannot target subject pronouns, which have the option of parsing with prosodic material to their left within the same phase. While post-posing is an optional process, it varies

with other processes that parse the direct object pronoun in ways that satisfy STRONG-START. A non-postposed pronoun is either strengthened to the status of a prosodic word or parses with material to the left. Elfner proposes that STRONG-START (specifically STRONG-START( $\sigma$ ), which governs the parsing of function words) is ranked equally with LINCORR in Connemara Irish, so that the pronoun can either post-pose or parse leftwards (or be strengthened).<sup>66</sup>

As in SENĆOFEN, branching function words, such as prepositions and determiners, do not incur linearization violations in Connemara Irish. Elfner (2012) handles this with a two-tiered LINCORR constraint, where a linearization violation involving a head-complement relationship violates a higher ranked constraint than a linearization violation involving a specifier-head, adjunct-head or adjunct-specifier relationship. However, this approach does not solve the question of why prepositions and determiners do not phrase variably, but always phrase rightwards with their complements, while subject and object pronouns can parse leftwards in order to avoid a STRONG-START violation.

The alternation to the Function Word Adjunction Principle proposed in this thesis, which distinguishes between the parsing of branching and non-branching function words, may help resolve this puzzle. With the alteration I have proposed, it is possible to rank MATCH-PHRASE above STRONG-START, preventing variable parsing of branching function words, but not pronoun post-posing, since, under this analysis, non-branching function words do not project a prosodic phrase and can post-pose without violating MATCH-

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<sup>66</sup> This contrasts with SENĆOFEN, where the linearization correspondence constraint is lower ranked than STRONG-START, so that the 2PCs must follow their host.

PHRASE. Ranking MATCH-PHRASE above STRONG-START will also not prevent leftwards encliticization of the pronouns, since this will also not violate MATCH-PHRASE.<sup>67</sup>

#### 4.2 Auxiliary placement in Eastern Armenian

Eastern Armenian, like Connemara Irish, exemplifies an interaction between linearization and prosodic phrasing at the  $\nu$ P phase. In Eastern Armenian, there is a clitic auxiliary verb that occurs second within the  $\nu$ P (Kahnemuyipour & Megerdooian, 2011). That is, it occurs following the main verb (2a), a preverb (2b), a nonspecific direct object (specific direct objects scramble out of  $\nu$ P) (2c,e), or a manner adverb (2d). As illustrated by (2d-e), the host for the auxiliary clitic can be a phrasal constituent.

- (2) a. me hat šun [<sub>VP</sub> vaz-vez-um=**a**]  
 one CL dog run-REDUP-PROG=**be.3S.PRES**  
 ‘A dog is running around.’
- b. ara-n ir nkar-ner-ə mez [<sub>VP</sub> chuych=**a** tal-u]  
 Ara-NOM his picture-PL-SPEC us demonstration=**3S.PRES** give-FUT  
 ‘Ara will show us his pictures.’
- c. ara-n [<sub>VP</sub> girk<sup>h</sup>=**a** ar-el]  
 Ara-NOM book=**be.3S.PRES** buy-PERF  
 ‘Ara has bought a book/books.’
- d. es šun-ə [<sub>VP</sub> [<sub>AdvP</sub> šat arag]=**a** vaz-um]  
 this dog-NOM very fast=**be.3S.PRES** run-PROG  
 ‘This dog runs very fast.’
- e. yerex-erk-ə [<sub>VP</sub> [<sub>DP</sub> me hat metz muk]=**en** č<sup>h</sup>ar-el]  
 child-PL-NOM one CL big mouse=**be.3PL.PRES** find-PERF  
 ‘The children have found a big mouse.’

Which syntactic constituent precedes the auxiliary is determined by the hierarchy of syntactic constituents in the  $\nu$ P. Items within the  $\nu$ P are arranged as follows: [<sub>AdvP</sub><sub>manner</sub> <sub>DO</sub><sub>nonspecific</sub> Preverb Verb]. Of these items, the first, or highest, constituent precedes the auxiliary. This indicates that the position of the auxiliary is not derived by topicalization

<sup>67</sup> However, ranking MATCH-PHRASE above STRONG-START above still does not account for all the facts, because certain prosodic words are variably parsed where they come under pressure from both MATCH-PHRASE and STRONG-START. This could be handled with a two-tiered MATCH-PHRASE, with a version governing the parsing of prosodic words, which is equally ranked with STRONG-START, and a version governing the parsing of function words, which is higher ranked. I leave this to future research.

or focus movement of the preceding constituent, nor motivated by considerations of information structure, but simply determined by the hierarchical structure of the  $vP$ . This is puzzling, since this means that there is no obvious syntactic motivation for movement of the constituent preceding the auxiliary, yet the position of the auxiliary respects syntactic constituency. On the other hand, the enclitic status of the auxiliary offers an obvious phonological motivation for its second-position placement, but if the placement is phonological, it is surprising that it respects syntactic constituency. Selkirk's (2009, 2011) Match Theory offers a framework in which syntactic constituency is directly referenced in the phonological representation, suggesting a way to handle these facts (see also Richards, 2014). I sketch a preliminary analysis in the Match Theory framework here, but further research is necessary to fully determine the interplay between syntax and prosody responsible for this particular phenomenon.<sup>68</sup>

In order for the auxiliary to be within the Spell-Out domain of the  $vP$  phase, I will postulate that Voice is the phase head, giving a structure like that in (3a) for (2a) (I will continue to refer to the phase as the  $vP$  phase for simplicity). The derivation begins with the verb mapping to prosodic phrase.<sup>69</sup> The auxiliary is then added to the structure. As a branching function word, it should project a recursive prosodic phrase above the verb, becoming a proclitic contrary to fact. However, in the previous chapter (section 3.3.1), I discussed how branching function words at the edge of the CP phase in SENĆOŦEN do

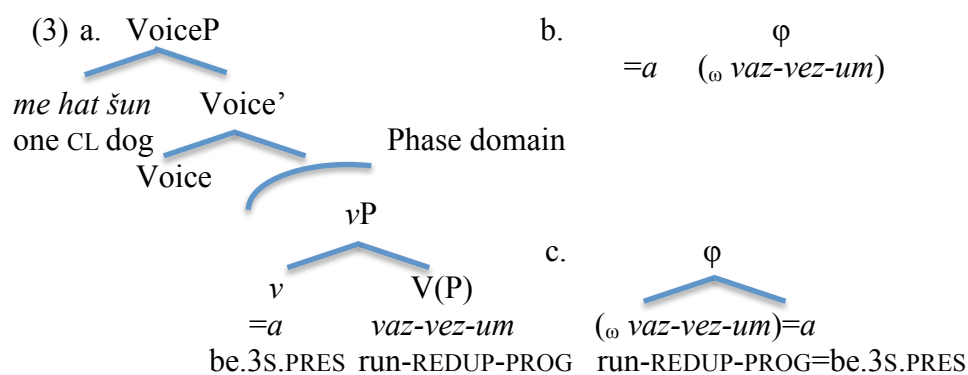
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<sup>68</sup> This preliminary analysis involves a departure from Schütze's (1994) criteria discussed in section 3.2, in that it introduces the idea that syntactic constituency may not be sufficient to motivate a syntactic movement analysis for a clitic's host (this is also implied in Kahnemuyipour and Megerdooian's (2011) discussion).

<sup>69</sup> This depends, however, on whether single words can themselves map to prosodic phrases (as in SENĆOŦEN), or not (as in Connemara Irish). Recall from fn. 34 that Elfner (2012:153) proposes a constraint Bin-Min to capture the preference for prosodic constituents to be binary (following e.g. Inkelas & Zec 1990):

(1) Bin-Min ( $\kappa$ ): assign one violation mark for every prosodic constituent of type  $\kappa$  that immediately dominates less than two daughter constituents.

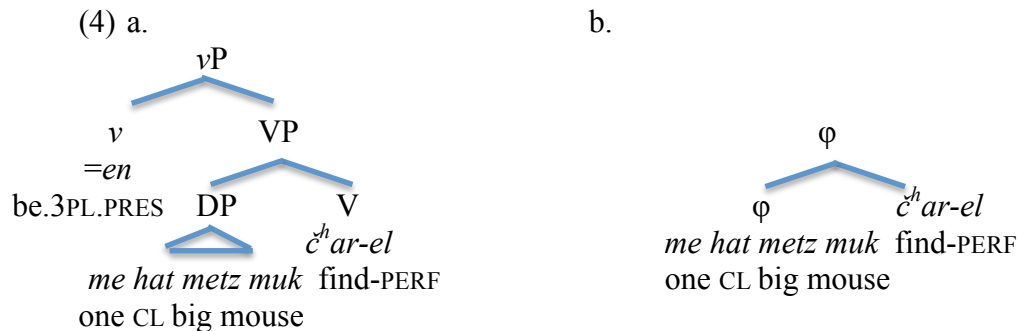
not seem to project a prosodic phrase. While it seems unlikely that the case of the Eastern Armenian auxiliary can be handled under an account where it is added above a null morpheme, preventing it from projecting a prosodic phrase (the account I adopted for SENĆOTEN), it can be handled under an account where a branching function word cannot project a prosodic phrase at the edge of a Spell-Out domain (an alternate explanation for the SENĆOTEN facts which was also discussed in the previous chapter).<sup>70</sup> In this case, the auxiliary remains unparsed (3b) and can ‘tuck in’ at the next stage of the derivation without violating MATCH-PHRASE (3c).



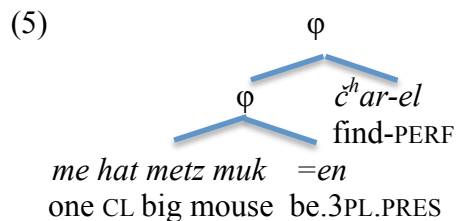
This account depends on a constraint ranking where STRONG-START is ranked above LINCORR, just as in SENĆOTEN.

Other cases are more complex. For instance, if (2e) has the syntactic structure in (4a), MATCH-PHRASE will give the prosodic structure in (4b) for the VP. Again, when the function word is added, it lacks prosodic structure.

<sup>70</sup> Alternately, STRONG-START could be ranked above MATCH-PHRASE, motivating a linearization violation at the phase edge even where this violates MATCH-PHRASE. If this is the case, prosodic phrasing should reflect this constraint ranking elsewhere in the language.



Since the clitic lacks prosodic structure at the phase edge, it can phrase within the previously constructed prosodic phrasing. It cannot occur within the DP, however, perhaps because this is a more embedded structure and represents an earlier stage in the derivation – the computation of the DP phase. Instead it occurs immediately following the DP, incurring as few violations of the lower ranked LINCORR as possible. This gives the prosodic structure shown in (5).



Other cases may be handled similarly, incurring fewer violations of LINCORR when the DP or adverb is not phrasal.

### 4.3 Serbo-Croatian, Warlpiri and ranking LINCORR

This leaves a puzzling contrast between Connemara Irish pronoun post-posing and Eastern Armenian auxiliary placement on the one hand and Serbo-Croatian and Warlpiri 2PC placement on the other. In the case of Connemara Irish pronoun post-posing and Eastern Armenian auxiliary placement, the functional item is placed following an initial syntactic constituent. In contrast, as seen in the previous chapter, Serbo-Croatian allows

2PCs to break syntactic constituents, occurring after the first prosodic word where this placement is not allowed for any other material.

- (6) a. U veliku Jovan ulazi sobu. (Schütze 1994:28-9)  
 in big Jovan enters room  
 ‘Jovan enters (the) big room.’  
 b. \*U ovu Jovan ulazi veliku sobu.  
 in this Jovan enters big room  
 ‘Jovan enters this big room.’  
 c. U ovu je veliku sobu Jovan ušao.  
 in this=aux big room Jovan entered  
 ‘Jovan entered (the) big room.’

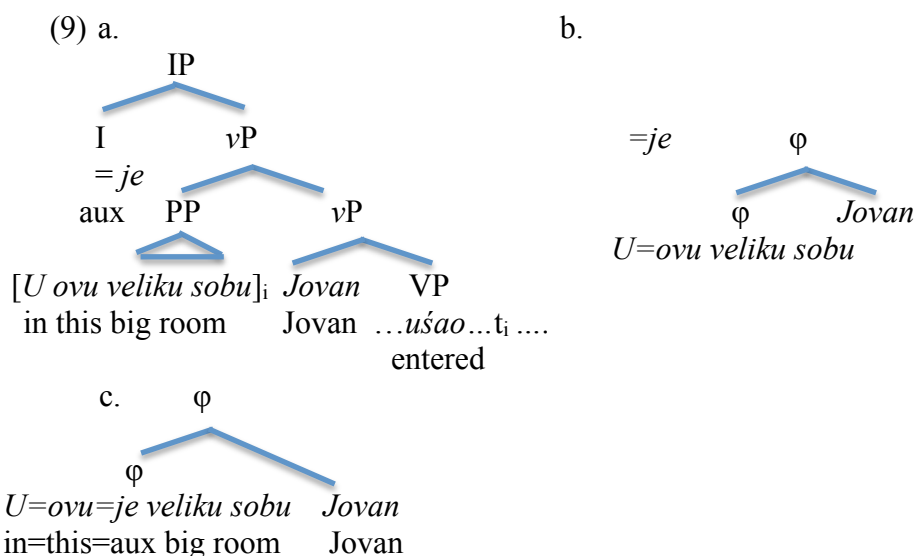
Warlpiri exemplifies a similar phenomenon. Legate (2008) argues that most 2PC placements in Warlpiri can be derived in the syntax. However, there are a small group of semi-productive preverbs, such as *pirri* ‘scattered’, that cannot be separated from the following verb by any clausal material, despite the general freedom of word order. Nevertheless, these preverbs may be separated from the verb by the 2PC cluster.

- (7) Pirri-ka-lu nguna-mi miyi manu kuyu kiji-rinja-warnu  
 scattered-PRES.NACT-3PL.SBJ lie-NPST food and meat throw-INFIN-after  
 ‘The food and meat lie scattered after being thrown.’  
 (Legate, 2008:52)

Clitic placement in Serbo-Croatian and Warlpiri is straightforwardly handled in the approach adopted here. I will take (6c) as a test case. Schütze (1994) (following Halpern 1992) proposes that the 2PCs in Serbo-Croatian are a complex head in INFL. For simplicity, I will assume that this is correct (though see Bošković 2001 for arguments that the case of 2PCs in Serbo-Croatian is more complex). Abstracting away from the details of the syntactic structure, (6c) (repeated here as (8)) could have the syntactic representation shown in (9a), with the PP scrambled to a position at the edge of the vP. The clitics in Infl, occupying the head at the edge of the Spell-Out domain of the phase will not project a recursive prosodic phrase (9b). As a result, the clitics will ‘tuck in’ to

the existing prosodic structure in order to satisfy STRONG-START. This puts them in a position following the initial prosodic word, but will not result in later placements, avoiding additional violations of LINCORR. The 2PCs cannot come between the preposition and the demonstrative because these form a single prosodic word (Schütze 1994), either through head movement in the syntax or because the preposition forms a recursive phonological word with the noun.<sup>71</sup>

- (8) U ovu je veliku sobu Jovan ušao.  
 in this=aux big room Jovan entered  
 ‘Jovan entered (the) big room.’



This leaves a puzzle regarding pronoun post-posing in Connemara Irish and auxiliary placement in Eastern Armenian. In both cases, I treated the function word as not being sensitive to MATCH-PHRASE. In this case, though, the function word should prefer to parse within the prosodic phrase to its right, incurring fewer violations of LINCORR, rather than following an entire phrasal syntactic constituent. In a derivational model, it might be possible to capture this placement with reference to phase boundaries, as

<sup>71</sup> Prepositions can affect word level stress assignment, giving independent evidence for an analysis where they are parsed within the prosodic word (e.g. Werle, 2009).

suggested above for Eastern Armenian.<sup>72</sup> Alternately, it could be captured by a two-tiered MATCH-PHRASE constraint, differentiating between function words and prosodic words and phrases. I leave this for future research.

#### **4.4 Ranking constraints and language typology**

The theory adopted here predicts that languages vary in how the constraints are ranked.

This predicts a typology of language behaviour with respect to interactions between prosodic mapping and linearization. The possible rankings and predicted behaviour are described in Table 11.

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<sup>72</sup> This is not implausible given the examples examined here, since the cases where the clitics interrupt a syntactic constituent in the Warlpiri and Serbo-Croatian examples do not involve clitic placement within a previously constructed Spell-Out domain, whereas clitic placement after the initial prosodic word within a syntactic constituent in Eastern Armenian and Connemara Irish would seem to involve placement within a previous Spell-Out domain, such as within the object DP in the case of the Armenian auxiliary (3). In the case of the Connemara Irish examples, it is also possible that pronoun post-posing can only target a position at the right edge of a syntactic constituent such as a PP because only the head noun of the PP is a prosodic word.

Table 11. *Possible constraint rankings and predicted behaviour.*

<b>Ranking</b>	<b>Predictions</b>
<b>STRONG-START &gt;&gt; MATCH-PHRASE &gt;&gt; LINCORR</b>	STRONG-START is always obeyed, preferably by reordering. MATCH-PHRASE violations may be incurred by this reordering.
<b>STRONG-START &gt;&gt; LINCORR &gt;&gt; MATCH-PHRASE</b>	STRONG-START is always obeyed, preferably by rephrasing.
<b>MATCH-PHRASE &gt;&gt; STRONG-START &gt;&gt; LINCORR</b>	STRONG-START is satisfied only where this does not incur a MATCH-PHRASE violation.
<b>MATCH-PHRASE &gt;&gt; LINCORR &gt;&gt; STRONG-START</b>	Spell-Out will be faithful to the syntactic structure.
<b>LINCORR &gt;&gt; STRONG-START &gt;&gt; MATCH-PHRASE</b>	STRONG-START is satisfied only by rephrasing.
<b>LINCORR &gt;&gt; MATCH-PHRASE &gt;&gt; STRONG-START</b>	Spell-Out will be faithful to the syntactic structure.
<b>STRONG-START, MATCH-PHRASE &gt;&gt; LINCORR</b>	Reordering in order to obey STRONG-START, but not where this violates MATCH-PHRASE. Variation between rephrasing and faithfulness to MATCH-PHRASE in other cases.
<b>STRONG-START, LINCORR &gt;&gt; MATCH-PHRASE</b>	Rephrasing in order to obey STRONG-START. Variation between reordering and violating STRONG-START at the edge of a Spell-Out domain.
<b>STRONG-START, MATCH-PHRASE, LINCORR</b>	Optional rephrasing or reordering to repair STRONG-START violations
<b>MATCH-PHRASE, LINCORR &gt;&gt; STRONG-START</b>	Spell-Out will be faithful to the syntactic structure.
<b>STRONG-START &gt;&gt; MATCH-PHRASE, LINCORR</b>	Variation in whether STRONG-START is satisfied by rephrasing or reordering.
<b>MATCH-PHRASE &gt;&gt; STRONG-START, LINCORR</b>	Optional reordering where this does not violate MATCH-PHRASE.
<b>LINCORR &gt;&gt; MATCH-PHRASE, STRONG-START</b>	Optional rephrasing to repair STRONG-START violations. No linearization violations.

If languages do not vary along the parameters expected from the possible rankings given in Table 1, it may be that an approach to PF that involves ranked constraints is not on the right track. Instead, a fully derivational model of P-computation may be more appropriate. I leave this to future research.

#### **4.5 Conclusion**

In this thesis, I have argued that 2PC placement in SENĆOŦEN follows from independently motivated mechanisms at the PF interface. I take a derivational approach to P-computation, where each stage of structure building is evaluated by a set of constraints (following López, 2009). In my analysis, mapping from syntactic to prosodic structure is evaluated by the constraint MATCH-PHRASE (Selkirk, 2009, 2011; Elfner, 2012), which maps syntactic XPs to prosodic phrases. The correspondence between syntactic and prosodic structure is only disrupted in order to avoid violations of STRONG-START, a phonological markedness constraint.

STRONG-START is ranked above LINCORR, the constraint governing linearization of syntactic structure, allowing linearization violations to occur; however, since linearization violations involve disrupting existing prosodic structure, linearization violations will usually be accompanied by MATCH-PHRASE violations. Because MATCH-PHRASE is equally ranked with STRONG-START in SENĆOŦEN, this prevents linearization violations in most cases (it is preferable to violate STRONG-START, than to violate MATCH-PHRASE and LIN-CORR). However, I also argue that non-branching function words are sufficiently prosodically deficient that they avoid a MATCH-PHRASE violation when incurring a linearization violation (branching function words are similarly lacking in prosodic structure when added immediately above a null category). Even with these

function words, linearization violations incurred in order to avoid a **STRONG-START** violation only occur at the edge of a Spell-Out domain, where the function word cannot simply phrase with a preceding category.

In **SENĆOFEN**, the constraints adopted to account for 2PCs also predict the phrasing of other types of function words in the language. While the predictions for the prosodic structure of **SENĆOFEN** still require further testing, the approach adopted here is initially quite successful in accounting for the prosodic structure of the language. In chapter 3, I discussed facts from *St'at'imcets* that suggest that 2PC placement may also be prosodically motivated, as opposed to syntactically motivated, in this Northern Interior Salish language; this means that other Salish languages may involve similar interactions between prosody and linearization, suggesting another area for further investigation.

Perhaps the most significant theoretical contribution of this analysis is that 2PC placement is phonological, but does not take place in isolation according to a construction-specific rescue operation. Rather, 2PC placement is motivated by a constraint on well-formed prosodic structure, **STRONG-START**, which has an effect on the mapping from syntactic to prosodic structure beyond achieving 2PC placement. In this model, 2PC placement takes place in the regular course of the mapping from syntactic to prosodic structure, which means that any constraint ranking (or operation if the model is altered to be fully derivation) that is involved in determining 2PC placement has implications for the overall mapping to prosodic structure. For languages that have both syntactically and prosodically motivated 2PC placement, such an analysis means that there is no separate rule that operates in the prosodic cases of clitic placement. The same mapping principles that govern cases where the relative order of 2PCs and their host is

determined syntactically will also govern the derivation of prosodic structure in cases where 2PC placement is determined phonologically.

This proposal also captures the intuition that the Spell-Out domain of the phase should constitute a well-formed prosodic unit, if it is the domain over which P-computation operates (Chomsky, 2001). Previous analyses have capitalized on the idea of the phase as a phonological domain, proposing a variety of phonological operations computed over the domain of the phase, or sensitive to phase edges, including nuclear stress assignment (Adger, 2007; Kahnemuyipour, 2003; Kratzer & Selkirk, 2007<sup>73</sup>), parsing of Major Phrases (Ishihara, 2007), and Comp-trace effects (Kandybowicz, 2009); phases have also been argued to define domains for the application of phonological rules within words (Newell & Piggott, 2014).

Perhaps the most intriguing question remaining at the end of this thesis is why the constraint STRONG-START should be operative in language at all. Recent research shows that prosodic phrasing affects decisions about syntactic parsing (e.g. Carlson, Frazier, & Clifton, 2009; Clifton, Carlson, & Frazier, 2002). In light of this research, it is unsurprising that prosody closely approximates syntactic structure. On the other hand, it is also perhaps unsurprising that languages would organize larger units, such as phases, so that their edges are maximally recoverable.

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<sup>73</sup> In fact, the analysis presented here bears some similarity to the Highest Phrase Condition proposed by Kratzer and Selkirk (2007:106):

- (i) The highest phrase within the spellout domain of a phase corresponds to a prosodic major phrase in phonological representation.

Both STRONG-START and the Highest Phrase Condition place a requirement on the prosodic structure of the Spell Out domain of the phase such that a prosodic category with specific structural characteristics occupies the (phonological) edge of the Spell-Out domain. While the Highest Phrase Condition does not straightforwardly derive 2PC placement in SENĆOŦEN, the similarity between the constraints suggests that the edge of the Spell-Out domain of the phase is important in the prosodic representation.

STRONG-START results in prosodic phrasing that is unexpected from the syntactic structure. These prosodic phrasings tend to give positional prominence to unpredictable material (e.g. lexical items), suggesting another motivation for STRONG-START, recoverability of the unpredictable. In addition, Giraud and Poeppel (2012) argue that the multi-timescale temporal organization and modulation of the speech signal, corresponding to different levels of phonological organization, is correlated with neuronal cortical oscillations, suggesting that speech is temporally organized in a way that is suited to the neuro-biological response systems (e.g. Giraud & Poeppel, 2012). This suggests another possible motivation for producing a prosodic structure with regular modulations at the level of prosodic phrasing, as well as at lower levels (e.g. word stress). If these intuitions are on the right track, it seems likely that mismatches between prosodic phrasing, syntactic structure and linear ordering, which would seem to make parsing harder at more abstract levels of syntactic structure, occur in order to organize information at another level of processing, perhaps more immediately related to auditory recoverability and neural modulation.

In concluding this thesis, I return to the predictions of this analysis and directions for future research. First of all, the set of constraints and their ranking makes concrete predictions about prosodic structure in SENĆOFEN, which have not yet been fully and systematically tested. Second, this analysis predicts linearization violations to be possible only in specific environments, which are determined by the derivational model and set of constraints governing prosodic structure building. In this chapter, I have examined some prosodically motivated linearization violations that indicate that these predictions are on the right track, though further cross-linguistic research is necessary. Finally, the analysis

presented here predicts differences in the behaviour of branching and non-branching function words, both in terms of phrasing and whether they participate in linearization violations. This is also a matter for future research.

At the end of this thesis, it is clear that much of the material is very technical in nature and not easily accessible to anyone without a background in linguistics. I nevertheless hope that the presentation of the examples, the descriptions of the 2PCs (particularly in chapter 2), and the teaching resource which follows, offer something of use and interest to those who care about this language, but have not been previously exposed to linguistic terminology. In moving forward, I hope that our work together will be increasingly collaborative and will continue to develop in ways that benefit those learning and teaching the SENĆOFEN SKÁL.

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## Appendix A – Teaching Resource

by STOLČEĚ Elliott and Marianne Huijsmans

*The descriptions in this teaching resource are modelled after the descriptions in section 2.6.2 in Montler 1986 and many of the examples are taken from or modelled off of the examples in this source or from the Saanich dictionary (Montler, forthcoming a). The resource is structured for use with children in a classroom setting with the guide of a language teacher, but could also be used with adult learners.*

SENĆOFEN distinguishes between **full words**, which carry more ‘weight’ in the intonation patterns of the language and often refer to concepts such as actions or nouns, and ‘little words’ or **particles**, which are ‘lighter’ (e.g. have less emphasis, being less loud and shorter) in the intonation patterns of the language and tend to have grammatical functions. Among these particles are a group that occur following the first full word of the clause. This group includes the subject particles, SEN ‘I’, ETE ‘we’ and SW ‘you’.

The position of these particles is often following the verb, but can be after other full words, such as EWE ‘not’ and EN,ÁN, ‘very’ if these come first in the sentence.

Sometimes more than one particle follows the first full word of the clause. In these cases the particles occur in a predictable order that is related to their grammatical function.

Particles telling what type of sentence it is come first. These are E, which marks yes/no questions and ĆE, which marks commands.

Particles that let the speaker express something about what he/she thinks about the information of the sentence come next. These are known as ‘modal’ particles. They include JE, which indicates that the speaker does not know the information directly, but heard it from someone else, or could infer it based on the available evidence. There is also YEĶ, which indicates that the speaker is hoping for what is expressed in the sentence. Finally, YEW indicates that the speaker is not sure that the information is true, but is guessing it.

Third come the particles that give information about whether the action in the sentence takes place in past or future. These are LE ‘past’ and SE ‘future’.

Fourth are the subject particles, mentioned above. One tricky thing about the subject particles is that SEN and ETE, the first person singular and first person plural particles, actually come before the future particle SE. They both follow LE, and the second person subject particle SW follows both SE and LE.

Particles that occur after the subject particles are varied. Most of them contribute more subtle meanings to the sentence, giving it its specific shade of interpretation and relating it to the context in which it is uttered.

This means that the particles are generally ordered by function according to the schema:

**Clause type > Modal > Tense > Subject > Varied**

If we put these in a table, we get roughly this:<sup>74</sup>

1. Clause type	2. Modal	3. Tense	4. Subject	5. Varied
E	JE	LE	SEN	OĆE
ĆE	YEŪ	SE	ŁTE	ŒEĆA
	YEŪ		SŪ	HAŁE
				OL,

There are even more of these particles than appear in this table, but these are plenty to learn for now.

Below are examples and exercises for the particles shown in the table. The subject and tense particles are introduced first, since they are used very frequently. Next the clause-type particles are introduced. The modal and varied particles are introduced last.

**SEN is used to speak about myself:**

QENET SEN ‘I looked at it.’

ĆAI SEN ‘I am working.’

U, O,MET SEN ‘I am sitting/I’m at home.’

SCUŒEL SEN ‘I’m in school.’

I,ŁEN SEN ‘I’m eating.’

YÁ, LE SEN ‘I went.’

QUYEŒ LE SEN ‘I was fishing.’

ĆAI SEN SE ‘I will be working.’

HÁWE SEN SE ‘I will be away.’

PÁQET SEN SE TŒE SĆAANEŪ ‘I’ll be smoking fish.’

<sup>74</sup> The table is based on Czaykowska-Higgins & Leonard, 2015:1732, which is based on descriptions in Montler, 1986:201.

For exercise 1, use vocabulary from the following list.

Vocabulary List 1

ĆAI working

ØENÁNET help

ØENNITET run

DODEQ going home

ELOLEŁ riding aboard (something)

KXÁLS dig clams

ĆÓKET give a drink

O,MET be at home

PE,PO,EL playing ball

QÁQI to be hungry

XEXŁÁM watching

XLOST feed (something)

Exercise 1. Can you fill in the blanks?

1. \_\_\_\_\_ SEN SE 'I will be running.'
2. \_\_\_\_\_ SEN SE 'I will be digging clams.'
3. \_\_\_\_\_ LE SEN 'I was going home.'
4. \_\_\_\_\_ LE SEN 'I was hungry.'
5. \_\_\_\_\_ LE SEN 'I was watching.'
6. \_\_\_\_\_ LE SEN E TFE STIĆ. 'I was on the bus.'
7. \_\_\_\_\_ LE SEN TFE PUS 'I was feeding the cat.'
8. \_\_\_\_\_ SEN SE TFE PUS 'I will give the cat a drink.'

9. \_\_\_\_\_ LE SEN TE TÁN ‘I was helping mum.’
10. \_\_\_\_\_ LE SEN E TFE SENĆOFEN ‘I was working on SENĆOFEN.’
11. \_\_\_\_\_ LE SEN ‘I was playing ball.’
12. \_\_\_\_\_ SEN OL ‘I was just at home.’

**ŁTE is used when a group of people including the speaker is the subject of the sentence:**

- ŁALNONĚT ŁTE ‘We finally got to shore.’
- I,ŁEN ŁTE ĆS SĆAANEW ‘We are eating the fish.’
- YÁ, ŁTE SCUL. ‘We are going to school.’
- NIŁ TFE Á,ŁEN ŁTE ‘It’s our house.’
- NIŁ TFE SĆÁĆE ŁTE ‘It’s our friend’
- DOQ ŁTE ‘We’re going home.’
- JÁN ŁTE ĆE ‘We arrived home.’
- ĆENENĚTEL ŁTE TFE SILE ŁTE. ‘We’re helping our grandfather.’
- KPESET SE ŁTE ĆEĆILES. ‘We will be gathered in the morning.’
- YÁ, ŁTE OX E TFE SKÁPEŁ ‘We are going to the gathering.’
- DIWIYEŁ YEW ŁTE OL ‘We should (or must) just pray.’

For excersice 2, use vocabulary from the list below.

Vocabulary List 2

DÁĆEŁ go across

EMNI,EN hunting

ETOTEN be sleepy

JINNU be annoyed

ŁĆIŹES be tired

QÁQI be hungry

SĆÁCE friend

SCUŹEL school

ŚÁSE be thirsty

ŚWŹÁLEŹEN feelings

TOM had enough

WO,ET driving a deer

Exercise 2. Can you give the SENĆOFEN sentence for each of the English sentence?

13. It's our friend. \_\_\_\_\_.

14. It's our school. \_\_\_\_\_.

15. It's our feelings. \_\_\_\_\_.

16. We are thirsty. \_\_\_\_\_.

17. We are hungry. \_\_\_\_\_.

18. We are tired. \_\_\_\_\_.

19. We are sleepy. \_\_\_\_\_.

20. We are annoyed.  
\_\_\_\_\_.

21. We have had enough.  
\_\_\_\_\_.

22. We are hunting.  
\_\_\_\_\_.

23. We are driving the deer (a method of hunting).  
\_\_\_\_\_.

24. We're going across.  
\_\_\_\_\_.

**SW** is used when the person you are talking to is the subject of the sentence:

LÁ,S SW. 'You fixed me up.'

QENNONES SW. 'You see me.'

EMET SW. 'Sit.'

NUILEN SW 'Go inside.'

LO,E SW ÇO HILET? 'Did you roll it?'

Use vocabulary from the following list for exercises 3-4.

Vocabulary List 3

ÇAḲ fell it

ĆELUTṼ turn it over

ĆENET bury it

ÇÁLEST hide it

ÇÁNET drop it

ÇÁTET pry it

DÁ,ET taste it/try it/test it

ENÁ come

ENEṼT stop it

ENIṼT keep it still

ENOWT pass it to

IEEN eat

HEMENT hammer it

HILET roll it

HOKÉT smell it

ÍCET dip it

ĶÁLTŪ talk to it

ĶOKÉT drink it

LEMÁT kick it

QELQOLEST skin it/peel it

ŠÁMET dry it

ŠELEŅ climb/climb up i

ŠTEN walk

TÁLET find the way with a foot

TÁ,ET lift it

TÍYEĶT dig it up

TÁČET wash it

TĀBET touch it/feel it

TĀLEST back it up

TEČEĶT step on it

ŪÁTET lower it

ŪILEŅ get down/climb down

ŪTÁLĶEN answer it

ŪQET pull it

XELLEET draw it/write it/mark it

XEXĀT imitate it/copy it

XILTŪ throw it

Exercise 3. Can you match the SENĆOFEN sentences with their English translation? Put the letter beside the correct English translation in the blank beside the SENĆOFEN sentence.

25. ŠTEN SW. ___	a. 'Dig it up.'
26. ILEN SW. ___	b. 'You throw it.'
27. ENÁ SW. ___	c. 'Eat.'
28. HILET SW. ___	d. 'Peel it/Skin it.'
29. FÁ,ET SW. ___	e. 'Walk.'
30. XILTW SW. ___	f. 'Smell it.'
31. ČÁNET SW. ___	g. 'Step on it.'
32. WQET SW. ___	h. 'Stop him/her/it.'
33. HOKET SW. ___	i. 'Wash it.'
34. FÁLET SW. ___	j. 'Pry it.'
35. ČAḲ SW. ___	k. 'Roll it.'
36. ČÁTET SW. ___	l. 'Fell it.'
37. ČENET SW. ___	m. 'Come.'
38. FÍYEḲT SW. ___	n. 'Imitate it/Copy it.'
39. ČÁLEST SW. ___	o. 'Pull it.'
40. TÁLEST SW. ___	p. 'Bury it.'
41. HEMENT SW. ___	q. 'Lift it.'
42. LEMÁT SW. ___	r. 'Kick it.'
43. ENOWT. ___	s. 'Drink it.'
44. ENEWT. ___	t. 'Taste it/Try it/Test it.'
45. ENIW <sup>T</sup> SW. ___	u. 'You drop it.'

46. TĀBET SW. ____	v. 'Hammer it.'
47. DĀ,ET SW. ____	w. 'Dip it.'
48. TĀCET SW. ____	x. 'Find your way with your foot.'
49. QELQOLEST SW. ____	y. 'Back it up.'
50. ICET SW. ____	z. 'Hide it.'
51. TEĆEKT SW. ____	aa. 'You come down.'
52. KÓKET SW. ____	bb. 'Climb it.'
53. XEXÁT SW. ____	cc. 'Keep it still.'
54. WTÁLKĒN SW. ____	dd. 'Touch it/Feel it.'
55. KÁLTW SW. ____	ee. 'Talk to it.'
56. ŠELEŃ. ____	ff. 'Pass it to.'
57. WILEŃ SW. ____	gg. 'Answer it.'

Exercise 4. Can you make the following instructions into questions and questions into instructions?

58. LO,E SW ĆO WĀTET? 'Did you lower it?' \_\_\_\_\_.

59. ŠÁMET SW. 'You dry it.' \_\_\_\_\_.

60. XELLET SW. 'You draw/write/mark it.' \_\_\_\_\_.

61. LO,E SW ĆO ĆELUTW? 'Did you turn it over?' \_\_\_\_\_.

**LE, is used to emphasize that something took place in the past:**

ĆĒ LA,SÍSEŃ LE, SW 'You did fix it for me.'

ĆĒ QEN,STONĒS LE, SW 'You showed it to me already.'

YÁ E LE, SW 'Did you ever go?'

QENTÁL,NĒN, LE, SEN 'I wanted to see it.'

U, SKÁKEP LE, 'It used to be tied.'

ÇENÁNETEN LE, TFA,IYE ‘They were helped.’

Can you make SENĆOTEN sentences for the English ones below? Use these words to make the sentences: SEN, ËTE, SW, LE, ELOLEË, QÁQI, JINNU, ETOTEN, WTÁLKËN, HEMENT, ŠÁMET, TÁÇET, TÁLEST, DÁ,ET, FÁLET, KXÁLS. You can use the same word more than once.

62. We were annoyed. \_\_\_\_\_.
63. I hammered it. \_\_\_\_\_.
64. He washed it. \_\_\_\_\_.
65. You backed it up. \_\_\_\_\_.
66. She answered it. \_\_\_\_\_.
67. I tried it. \_\_\_\_\_.
68. We dried it. \_\_\_\_\_.
69. He found his way with his foot. \_\_\_\_\_.
70. We were hungry. \_\_\_\_\_.
71. You were on the bus. \_\_\_\_\_.
72. We were digging clams. \_\_\_\_\_.
73. You were sleepy. \_\_\_\_\_.

**SE, is for talking about something that will happen in the future:**

MÁQEË SE, SW. ‘You’ll get hurt.’

ELKËLLO, SE E ÇS ÁL,EN. ‘He’s going to buy a house.’

TELEKTEL ËTE SE,. ‘We’re going to share it with each other.’

ÉÁAL ËTE SE,. ‘We’ll get to shore.’

Can you make SENĆOTEN sentences for the English ones below? Use these words to make the sentences: SEN, ËTE, SW, LE, SE, and words from the vocabulary lists and examples above.

74. We will walk. \_\_\_\_\_.
75. You will see me. \_\_\_\_\_.
76. He will drop it. \_\_\_\_\_.
77. We will play ball. \_\_\_\_\_.
78. He will go home. \_\_\_\_\_.
79. She will dip it. \_\_\_\_\_.
80. He will tie it. \_\_\_\_\_.
81. You will smell it. \_\_\_\_\_.
82. He will show it to me. \_\_\_\_\_.

**E is used to make a question that can be answered with HAA ‘yes’ or EWE ‘no’:**

TĆESET E SW ‘Did you poke yourself’

HOKNEW E SW ‘Did you smell it?’

YÁ, E LE, SW ‘Did you go?’

U, WESÁLS E SE, TFE SKÁXE? ‘Will the dog be barking?’

E always comes right after the first full word of the sentence. Can you make the following into questions?

83. U, MEQ TFE SKAXE WESÁL,S. ‘All dogs barks.’  
\_\_\_\_\_? ‘Do all dog bark?’

84. QENNEW SW ‘You saw it.’  
\_\_\_\_\_? ‘Did you see it?’

85. EN, STI, ĆEN,S ĆA. ‘You want to work.’  
\_\_\_\_\_? ‘Do you want to work?’

86. YÁ, ĽTE LE SCÍEL. ‘We went to get firewood.’  
\_\_\_\_\_? ‘Did we go to get firewood?’

87. Á,JET SW TFE LETÁM. ‘You wiped the table.’  
\_\_\_\_\_? ‘Did you wipe the table?’

88. ŁĆIÇES SW. 'You are tired.'  
 \_\_\_\_\_? 'Are you tired?'

Use the following words to make five more questions: MÁQEŁ, TELEKTEL, QÁQI, ŚÁŚE, ŚELEŃ, SW, E, SE.

89. \_\_\_\_\_?

90. \_\_\_\_\_?

91. \_\_\_\_\_?

92. \_\_\_\_\_?

93. \_\_\_\_\_?

**ĆE is used when telling someone what to do sternly or authoritatively:**

YÁ, ĆE 'Go ahead then!'

E,MET ĆE 'Sit up!/Sit down!'

ĆA ĆE SE SW 'You will work/you will be working!'

QENETOL, W ĆE 'Look at us!'

**Instructions can also be given without ĆE and are less forceful:**

FÍŁEŃ SW 'Stand up.'

**Requests do not use ĆE:**

OXTONES E ÇTE NE TÁN 'Take me to my mother.'

Can you make the following commands in SENĆOFEN, using ĆE? Like E, ĆE follows the first full word of the question. Use the following sentences to guide you.

YÁ, SEN ITET. 'I went to bed.'

94. \_\_\_\_\_! Go to bed!

ÇONENET SEN 'I ran.'

95. \_\_\_\_\_! Run!

ĶĀL SEN. 'I spoke.'

96. \_\_\_\_\_! Say something!

**JE is used when you've heard from someone else that something is confirmed, or when you know something will happen based on what the evidence you have.**

TÁCEL JE TFEN SÁCS ĆÉCILES. 'Your uncle will be arriving in the morning.' (It's confirmed; I've talked to him on the phone.)

ĆAI JE SEN SE ENÁ SE ITEĻONSET 'I'll be working in the fall (it's confirmed).'

EN,Á JE SE 'He/she/it will come (I hear he/she/it is coming).'

ĆTÁLE JE ĆE 'He's got money, apparently.' (I must have seen it.)

MÁQEĻ JE ĆSU NIĻ 'He got hurt.' (You must have gone and talked to the coach.)

TIU, JE ĆO, ET NEĆE 'He ran away from you.'

Context: The addressee did not know that he ran away and the speaker only knows it from someone else.

It is sometimes used in stories, which are from another person:

SÁWSEW JE LE, ĆS SKO,ENs, TFE HEM,U 'He was lazy to get water, the pigeon.'

NIĻ JE SE ŠKENKEN ĆENS SKEM,T 'They say they become thieves when you cut them (a baby's fingernails).'

Can you come up with a context in which you might use the following SENĆOFEN sentences?

97. LÁ,ET JE LE TFE NE MÁN TFE LETÁM.

Context: \_\_\_\_\_.

98. DOQ JE LE.

Context: \_\_\_\_\_.

99. TÁĆET JE LE FE MÁ.

Context: \_\_\_\_\_.

100. ĻEMEW JE SE.

Context: \_\_\_\_\_.

Can you put the following sentences into SENĆOFEN? Notice that JE comes before SE and LE, as well as before SEN, SW, and LTE. You don't need to translate the parts in parentheses.

101. You are yawning. Apparently, you're sleepy. (Hint: Use WI, ƘES 'yawning'.)

\_\_\_\_\_.

102. Apparently, she will get better (you heard from somebody else).

\_\_\_\_\_.

**YEW** is used when the speaker supposes something is true, but does not have evidence for it:

NIĒ YEW ƆTE NE TÁN 'It must be my mother.'

Note: The speaker doesn't know for sure, but is guessing.

SKÁƘU, YEW SW 'You must be rested.'

NI, YEW ƆSE FO, ƆES 'Somebody's squealing on me (but I don't know who).'

**YEW** can be used to mean 'I wonder':

SQA YEW LE, EƆS ƆELENS 'He mustn't have been able to fly.'

STÁN YEW OƆE ƆSA, E 'I wonder what it is?' Note: When you hear something, but you can't see what it is.

Use YEW to make sentences that fit with the following contexts:

103. What might you say to someone when it's getting late and that person has been working really hard? \_\_\_\_\_ . (Hint: Use OL, after SW. OL, contrasts the situation with other possible situations. See below for further discussion.)

104. What might you say if you find a bucket of clams at the back door and you think maybe your brother dug for them?

\_\_\_\_\_.

105. What might you say if your friend was sewing and now she has a Bandaid on her finger? \_\_\_\_\_.

106. What might you say if someone arrives at your house, but you know that his car is broken, and he is by himself, so no one gave him a ride?

\_\_\_\_\_.

107. What might you say if you find your phone on the ground? \_\_\_\_\_ . (Hint: use ƆÁ, NEW 'dropped it')

108. What might you say if you hear someone's stomach growling?

\_\_\_\_\_. (Hint: Use OĆE after SW)

**YEK is used to tell someone that you hope or wish for the thing you are talking about:**

LÁU, YEK SEN SE OL, 'I hope I get better.'

LÁU, YEK SW OL, 'I hope you get better/May you get better.'

Note: Without YEK, this sentence means 'You got better' or 'You are getting better'.

YEK adds the meaning that I (the speaker) am hoping you will get better.

**With LE, YEK can also be used to indicate a wanted, but not real, state of affairs:**

YÁ, YEK LE, SEN 'I ought to go/I wish I'd gone.'

Note: In the first translation, the speaker wants to go, but has not actually gone.

ÇE I,ĽEN, YEK LE, SEN OL, 'I wish I was eating already/I wish I'd been eating already/ I ought to be eating already.'

Note: In the last translation, the speaker wants to be eating, but is not eating yet.

Can you make the following SENĆOFEN sentences? Note that YEK comes before LE 'past' and SE 'future'.

109. I hope I go. \_\_\_\_\_ . (Hint: Use OL, after YEK)

110. I wish I were fishing. \_\_\_\_\_ .  
(Hint: Use QUYEÇ 'fishing' and use OL, after YEK)

111. I hope you find it. \_\_\_\_\_ .  
(Hint: Use FIL,EC 'find' and use OL, after YEK)

112. I hope you come. \_\_\_\_\_ .

113. I hope I peeled it. \_\_\_\_\_ . (Hint: Use OL, after YEK)

114. I hope you try it. \_\_\_\_\_ . (Hint: Begin with U,)

115. I hope I fix it. \_\_\_\_\_ . (Hint: Begin with U, and use LÁ,ET 'fix it')

116. I hope you answer it. \_\_\_\_\_ . (Hint: Begin with U,)

117. I hope I stopped it. \_\_\_\_\_ .

118. I hope I go hunting. \_\_\_\_\_ .

**OĆE is used in questions asking STÁN 'what', SÁN 'who', TW SÁN 'whose', EXÍN 'where', and ĆENTÁN 'when'.**

STÁN OĆE ŁÁ,E 'What is this?'

ENS INET OĆE 'What do you mean?/What are you saying?'

ENS INET OĆE TFE SĆAANEW? 'What did you say the fish is?'

NÍŁ OĆE SÁN 'Who is it?'

EXÍN OĆE 'Where is it?'

TW SÁN OĆE MOI E TFÁ,E 'Whose basket is it?'

**These types of questions can also be formed without OĆE:**

TW SÁN MOÍ TFÁ,E 'Whose basket is it?'

Can you make five questions using OĆE and each of the question words: STÁN 'what', SÁN 'who', TW SÁN 'whose', EXIN 'where'?

119. \_\_\_\_\_ ? What is it?

120. \_\_\_\_\_ ? Who is it?

121. \_\_\_\_\_ ? Whose \_\_\_\_\_ is it? (fill in the blank with the translation of the noun that you use in the SENCÓFEN question)

122. \_\_\_\_\_ ? Where is it?

Can you make following sentences in SENCÓFEN?

123. Where were you? \_\_\_\_\_ .

124. Where is my canoe? \_\_\_\_\_ . (Hint: SNEWEL is 'canoe')

**ŒÉĆÁ is used to ask for an explanation or to offer an explanation:**

NÍĚ ŒÉĆÁ TWĚĚ,ELKSET EŒS ŒELEŇS ‘That’s why they make that flapping noise when they fly.’

I, SXĚNI,EN, SEN SE, ŒÉĆÁ ŒNES YÁ, ‘How am I going to get there?’

XĚNÍN ŒÉĆÁ EN ŠW YÁ, ‘Why is it that you went?’

NÍĚ ŒÉĆÁ ŠXĚNIŇS ‘Why does that do...?’

Can you match the following sentences with their English translations? (Hint: TWĚ means ‘become’ and ŠW means ‘reason for’.)

- |  |                                    |
|--|------------------------------------|
| 125. a. EXIN SE SW ŒÉĆÁ?                     | i. That’s why he became a pidgeon. |
| b. NIĚ ŒÉĆÁ ĆSE LÁ,Es TU, ĆĚ NIĚ.            | ii. That’s why the dog is barking. |
| c. XĚNIŇ ŒÉĆÁ EN, ŠW XEN,OW E TFA,E?         | iii. Why did you do that?          |
| d. NIĚ ŒÉĆÁ TWĚ HEMUs                        | iv. That’s why he’s from here now. |
| e. NIĚ ŒÉĆÁ XĚNIŇ ŒE I, WE,WESAL,S TFE ŠKAXE | v. Why did you run?                |
| f. XĚNIŇ ŒÉĆÁ EN ŠW ŒONENET?                 | vi. Where will you be?             |

Can you make the following SENĆOFEN sentences? Note that ŒÉĆÁ follows the subject particles SEN, ĚTE and SW.

126. Why did you come? \_\_\_\_\_?

127. Why did you walk? \_\_\_\_\_?

128. Why are you tired? \_\_\_\_\_?

**ŒE,ŒO, is used when you are making a statement. ŒE, is used for the present and ŒO, is used for the past:**

JÁTET SEN ŒO, ‘I sewed it.’

JÁYET SEN ŒE, ‘I’m sewing it now.’

ÇĒ NE SÇESES LE, ÇO, ‘I already sent it.’

ÇENÁNĒTEN ÇO TĀÁ,IYE ‘They got helped.’

ÇE, can also be used to emphasize information that the listener may not be considering (perhaps because the listener has forgotten it):

ÇĒ EN ÇESES ÇO, ‘You sent it already.’

Can you put the following into SENCÓTEN? You don’t need to translate the part in parentheses.

129. He must be at home (you can see his car in the driveway) (Hint: JE).

---

130. Apparently, he felled it (you see that the tree in his front yard has been cut down) (Hint: Use JE).

---

131. a. ÇENONĒT ÇE,.

i. He/she threw it.

b. ÇEN,ÁT SEN ÇE,.

ii. He/she is at home.

c. HILET SEN ÇE,.

iii. We played ball.

d. I, DODEQ ÇE,.

iv. I rolled it/am rolling it.

e. PE,PO,EL LE ĒTE ÇO,.

v. I’ve already eaten.

f. XILTŪ LE ÇO,.

vi. I lifted it.

g. TĀÁ,ET LE SEN ÇO,.

vii. He/she is going home.

h. ÇĒ ĪĒEN SEN ÇO,.

viii. She’s gone for a run.

i. U, O,M,ET ÇE,.

ix. I’m holding it (in hands).

**HÁLE is used when talking to more than one person contained within a group, crowd, room, etc.:**

ÇENNĪTEN SW HÁLE ‘He helps you all (here).’

ÇENÁNĒT LE SW HÁLE ‘You all helped him.’

ĆTÁLE SW HÁLE ‘All of you here have money.’

EMET SW HÁLE ‘Sit down!’

NIE FEN TÁN HÁLE ‘It’s your mum (all of you here).’

NIE TFEN MÁN HÁLE ‘It’s your dad (all of you here).’

Can you make SENĆOFEN sentences to go with the English sentences below? Notice that HÁLE always follows SW (and SW follows LE and SE).

132. You all saw it. \_\_\_\_\_.

133. I saw you all. \_\_\_\_\_.  
(Hint: Use QENNONE)

134. Are you all hungry? \_\_\_\_\_.

135. You all pry it. \_\_\_\_\_.

136. You are all sleepy. \_\_\_\_\_ (Hint:  
Begin with U,)

137. Are you all annoyed? \_\_\_\_\_ (Hint:  
Begin with U,)

138. I was watching you all.  
\_\_\_\_\_  
(Hint: Use XEXLÁ,EM,ESE)

139. You were all on the bus. \_\_\_\_\_ (Hint:  
TFE STIĆ is ‘the bus’)

**OL, is used to when contrasting something with a set of other possibilities. It can be translated as ‘just’ or ‘only’:**

U, O,MET SEN OL, ‘I’m just at home/sitting.’ Note: This emphasizes that the speaker just sat and didn’t do anything else.

I,WOWE YÁ, SEN OL, ‘Maybe I’ll just go.’ Note: This can be used in a context where the speaker is waiting for someone, who has not shown up. The speaker is considering going alone instead of continuing to wait.

U, NIE OL, TFE PUS ‘It’s just a cat.’

MEMIM,ENTW SEN SE OL, 'I'm just going to make it small.'

MEMI,MENTW SEN OL, TFE PUS 'I'm going to make the cat small (e.g. when carving)'

ŠTENNES SEN SE, OL, LÁ,E TELÁ,E 'I'm just going to walk over there (indicate with hand gesture the direction).'

Can you make the following English sentences into SENĆOFEN? Notice that OL, comes after SEN, LTE and SW. For 134-137, fill in the parentheses, giving a situation that might be expected given the action in the sentence. In these cases, the speaker is contrasting the actual situation with likely alternate situation. Follow the pattern shown in 132 and 133. (You don't need to translate the part in parentheses into SENĆOFEN).

140. I'm just lowering it (not moving it somewhere else). \_\_\_\_\_.  
(Hint: Begin with U,)

141. He's just backing it up (not driving it away). \_\_\_\_\_.  
(Hint: Use TE,ÁLESTES)

142. She's just copying it (not \_\_\_\_\_).  
\_\_\_\_\_. (Hint: Use XEXÁTES)

143. He will just smell it (not \_\_\_\_\_).  
\_\_\_\_\_.

144. I'm just felling it (not \_\_\_\_\_). (Hint: Use ČAĶEW)  
\_\_\_\_\_.

## Appendix B – Answer Key<sup>75</sup>

1. **I, ĆENNITET** SEN SE. ‘I will be running.’
2. **KXÁLS** SEN SE. ‘I will be digging clams.’
3. **I, DODEQ** LE SEN. ‘I was going home.’
4. **QÁQI** LE SEN. ‘I was hungry.’
5. **XEXLÁM** LE SEN. ‘I was watching.’
6. **ELOLEĽ** LE SEN E TFE STIĆ. ‘I was on the bus.’
7. **XĽOST** LE SEN TFE PUS. ‘I was feeding the cat.’
8. **ĶÓĶET** SEN SE TFE PUS. ‘I will give the cat a drink.’
9. **ĆENÁNĚT** LE SEN FE TÁN. ‘I was helping mum.’
10. **ĆAI** LE SEN E TFE SENĆOFEN. ‘I was working on SENĆOFEN.’
11. **PE,PO,EL** LE SEN. ‘I was playing ball.’
12. **O,MET** SEN OL. ‘I was just at home.’
13. It’s our friend. **NIĽ TFE SCÁCE ĽTE.**
14. It’s our school. **NIĽ TFE SCUĆEL ĽTE.**
15. It’s our feelings. **NIĽ TFE ŚWKÁLECEN ĽTE.**
16. We are thirsty. **ŚÁŚE ĽTE.**
17. We are hungry. **QÁQI ĽTE.**
18. We are tired. **ĽĆICES ĽTE.**
19. We are sleepy. **ETOTEN ĽTE.**
20. We are annoyed. **JINNU ĽTE.**
21. We have had enough. **TOM ĽTE.**

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<sup>75</sup> Also coauthored by STOLĆEĽ Elliott and Marianne Huijsmans

22. We are hunting. **EMNI,EN LTE.**
23. We are driving the deer (a method of hunting). **WO,ET LTE.**
24. We are going across. **DÁCEĽ LTE.**
25. **ŠTEN SW. e. ‘Walk.’**
26. **ĽEN SW. c. ‘Eat.’**
27. **ENÁ SW. m. ‘Come.’**
28. **HILET SW. k. ‘Roll it.’**
29. **ŤÁ,ET SW. q. ‘Lift it.’**
30. **ĽILTŤ SW. b. ‘You throw it.’**
31. **ČÁNET SW. u. ‘You drop it.’**
32. **ŤQET SW. o. ‘Pull it.’**
33. **HOKET SW. f. ‘Smell it.’**
34. **ŤÁLET SW. x. ‘Find your way with your foot.’**
35. **ČAĽ SW. l. ‘Fell it.’**
36. **ČÁTET SW. j. ‘Pry it.’**
37. **ČENET SW. p. ‘Bury it.’**
38. **ŤÍYEĽT SW. a. ‘Dig it up.’**
39. **ČÁLEST SW. z. ‘Hide it.’**
40. **ŤÁLEST SW. y. ‘Back it up.’**
41. **HEMENT SW. v. ‘Hammer it.’**
42. **LEMÁT SW. r. ‘Kick it.’**
43. **ENOWT. ff. ‘Pass it to.’**
44. **ENEWT. h. ‘Stop him/her/it.’**

45. ENIŪT SW. cc. 'Keep it still.'
46. ŪABET SW. dd. 'Touch it/Feel it.'
47. DÁ,ET SW. t. 'Taste it/Try it/Test it.'
48. ŦÁCĒT SW. i. 'Wash it.'
49. QELQOLEST SW. d. 'Peel it/Skin it.'
50. ICĒT SW. w. 'Dip it.'
51. ŦĒĒĒKT SW. g. 'Step on it.'
52. KÓKET SW. s. 'Drink it.'
53. ŪEXÁT SW. n. 'Imitate it/Copy it.'
54. ŪŦÁLKĒN SW. gg. 'Answer it.'
55. KÁLTŪ SW. ee. 'Talk to it.'
56. ŠELEŪ SW. bb. 'Climb/climb up it.'
57. ŪILEŪ SW. aa. 'Get down/climb down.'
58. WÁTET SW. 'You lower it.'
59. LO,E SW ĆO ŠÁMET? 'Did you dry it?'
60. LO,E SW ĆO XELLEŦ? 'You draw/write/mark it.'
61. ĆELUTŪ SW. 'You turn it over.'
62. We were annoyed. JINNU LE ŁTE.
63. I hammered it. HEMENT LE SEN.
64. He washed it. ŦÁCĒT LE.
65. You backed it up. ŦÁLEST LE SW
66. She answered it. ŪŦÁLKĒN LE.
67. I tried it. DÁ,ET LE SEN.

68. We dried it. **ŚÁMET LE ŁTE.**
69. He found his way with his foot. **TÁLET LE.**
70. We were hungry. **QÁQI LE ŁTE.**
71. You were on the bus. **ELOLEŁ LE SW.**
72. We were digging clams. **KXÁLS LE ŁTE.**
73. You were sleepy. **ETOTEN LE SW.**
74. We will walk. **STEN SE ŁTE.**
75. You will see me. **QENNONES SE SW.**
76. He will drop it. **ĆÁNET SE.**
77. We will play ball. **PE,PO,EL SE ŁTE.**
78. He will go home. **DOQ SE.**
79. She will dip it. **ÍCET SE.**
80. He will tie it. **KÁPET SE.**
81. You will smell it. **HOKET SE SW.**
82. He will show it to me. **QEN,STONES SE.**
83. **U, MEQ E TFE SKAXE WESÁL,S?** Do all dogs bark?
84. **QENNEW E SW?** Did you see it?
85. **EN, STI, E ĆEN,S ĆA?** Do you want to work?
86. **YÁ, E ŁTE LE SCÍEL?** Did we go get firewood?
87. **Á,JET E SW TFE LETÁM?** Did you wiped the table?
88. **ŁĆICES E SW?** Are you tired?
- Answers will vary for 89-93. Possible answers are provided below:
89. **MÁQEŁ E SW?** Did you get hurt?

90. **TELEKTEL E SE SW?** Will you share it with one another?

91. **QÁQI E SW?** Are you hungry?

92. **ŚÁSE E SW?** Are you thirsty?

93. **ŚELEN E SW?** Did you climb?

94. **YÁ, ĆE ITET!** Go to bed!

95. **CONENET ĆE!** Run!

96. **KÁL ĆE!** Say something!  
Answers will vary for 138-141.

97. **LÁ,ET JE LE TFE NE MÁN TFE LETÁM.** Context: **My table had broken and my dad was planning to fix it. When I got home, the table was fixed.**

98. **DOQ JE LE.**

Context: **The man was at a meeting earlier, but later, when it was getting late, I looked for him and he wasn't there anymore.**

99. **ŲÁCET JE LE FE TÁ.**

Context: **The pot was dirty earlier and now it's clean, so I know my mum must have washed it.**

100. **LEMEW JE SE.**

Context: **I can tell that it's going to rain because the wind is from the southeast.**

101. You are yawning. Apparently, you're sleepy. (Hint: Use **WA,KES** 'yawning'.)  
**WA,KES SW. ETOTEN JE SW.**

102. Apparently, she will get better (you heard from somebody else).

**ĽAU, JE SE.**

Answers for 117-121 may vary.

103. What might you say to someone when it's getting late and that person has been working really hard? **ĽCIĀCES YEŲ SW OL,.** 'You must be tired/you're probably tired.'

104. What might you say if you find a bucket of clams at the back door and you think maybe your brother dug for them? **KXÁLS YEŲ LE OĆE.** 'He must have dug for clams.'

105. What might you say if your friend was sewing and now she has a Bandaid on her finger? **TĆESET YEW LE SW OĆE.** ‘You probably poked yourself.’

106. What might you say to someone who arrives at your house, but you know that his car is broken, and no one gave him a ride? **ŚTEN YEW SW OĆE ÁLE.** ‘He probably walked.’

107. What might you say if you find your phone on the ground? **ĆÁ,NEW YEW SEN OL,.** ‘I must have dropped it.’

108. What might you say if you hear someone’s stomach growling? **QÁQI YEW SW OĆE.** ‘You must be hungry.’

109. I hope I go. **YÁ YEK SEN OL,.**

110. I wish I were fishing. **QUYEC YEK SEN OL,.**  
(Hint: Use QEWYEC ‘fishing’)

111. I hope you find it. **FIL,EC YEK SW OL,.**  
(Hint: Use FIL,EC ‘find’)

112. I hope you come. **EN,Á YEK SW SE.**

113. I hope I peeled it. **QELQOLEST YEK SEN LE OL,.**

114. I hope you try it. **U, DÁ,ET YEK SW.**

115. I hope I fix it. **U, LÁ,SIT YEK SEN.**

116. I hope you answer it. **U, WTÁLKEN YEK SW.**

117. I hope stopped it. **ENEWT YEK LE SEN.**

118. I hope I go hunting. **YÁ, YEK SEN SE EMNI,EN.**

119. **STÁN OĆE?** What is it?

120. **SÁN OĆE?** Who is it?

121. **TW SÁN OĆE** \_\_\_\_\_ (e.g. **SĀXAXE**) **E TFA,E?** Whose \_\_\_\_\_ (e.g. dog) is it?

122. **EXIN OĆE?** Where is he/she/it?

123. Where were you? **EXIN LE SW OĆE?**

124. Where is my canoe? **EXIN OĆE TFE NE SNEWEL?**

125. a. EXIN SE SW ĆEĆÁ?  
 b. NIŁ ĆEĆÁ ĆSE LÁ,Es TU, ĆŁ NIŁ.  
 c. XENIN ĆEĆÁ EN, ŚW XEN,OW E TFA,E?  
 d. NIŁ ĆEĆÁ TWE HEMU,  
 e. NIŁ ĆEĆÁ XENIN ĆE I, WE,WESAL,S TFE SKAXE.  
 f. XENIN ĆEĆÁ EN ŚW ĆONENET?
- vi. Where will you be (anyway)?  
 iv. That's why he's from here now.  
 iii. Why did you bring it in that direction?  
 i. That's why he became a pidgeon.  
 ii. That's why the dog is barking.  
 v. Why did you run?

Can you make the following SENĆOFEN sentences? Note that ĆEĆÁ follows the subject particles SEN, ŁTE and SW.

126. Why did you come? XENIN ĆEĆÁ EN, W EN,Á?

127. Why did you walk? XENIN ĆEĆÁ EN, ŚW ŚTEN?

128. Why are you tired? XENIN ĆEĆÁ EN, ŚW ŁĆICES?

129. He must be at home (you can see his car in the driveway, but the person you're talking to canno).

U, O,M,ET JE ĆE.

130. Apparently, he felled it (you see that the tree in his front yard has been cut down).  
 ĆAK JE ĆE.

131. a. ĆENONET ĆE,.  
 b. ĆEN,ÁT SEN ĆE,.  
 c. HILET SEN ĆE,.  
 d. I, DODEQ ĆE,.  
 e. PE,PO,EL LE ŁTE ĆO,.  
 f. XILTW LE ĆO,.
- viii. She's gone for a run.  
 ix. I'm holding it (in hands).  
 iv. I rolled it/am rolling it.  
 vii. He/she is going home.  
 iii. We played ball.  
 i. He/she threw it.

**g.** ƒÁ,ET LE SEN ƆO,.

**vi.** I lifted it

**h.** CE ILEN SEN ƆO,.

**v.** I've already eaten.

**i.** U, O,M,ET ƆE,.

**ii.** He/she is at home.

132. You all saw it. **QENNEW LE SW HÁLE.**

133. I saw you all. **QENNONE LE SEN HÁLE.**

134. Are you all hungry? **QÁQI E SW HÁLE.**

135. You all pry it. **ƆÁTET SW HÁLE.**

136. You are all sleepy. **U, ETOTEN SE SW HÁLE.**

137. Are you all annoyed? **U, JINNU E SW HÁLE.**

138. I was watching you all. **XEXLÁ,EM,ESE LE SEN HÁLE.**

139. You were all on the bus. **ELOLEL LE SW HÁLE E TFE STIĆ.**

140. I'm just lowering it (not moving it somewhere else). **U, WÁTET SEN OL,.**

141. He's just backing it up (not driving it away). **TE,ÁLEST OL,.**

142. She's just copying it (not making it up). **XEXÁTES OL,.**

143. He will just smell it (not eat it). **HOKET OL,.**

144. I'm just felling it (not chopping it up). **ĆAKEW SEN OL,.**