

WH-CONSTRUCTIONS IN NĒHIYAWĒWIN (Plains Cree)

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ABSTRACT

This thesis provides an analysis of wh-questions in Nêhiyawêwin (Plains Cree). The study is done within the Principles and Parameters framework (Chomsky 1981, 1986, 1995).

I argue that Nêhiyawêwin wh-words like *awfna* 'who' are not generated in argument position and do not undergo A-bar movement to Spec CP (Chapter 3). Rather, they are licensed as the predicate of a nominal clause, and respect the same syntactic constraints as other nominal clauses: they are strictly predicate-initial; obey a referentiality hierarchy; and display agreement for number, animacy and obviation (chapter 4). I analyze Nêhiyawêwin nominal clauses as IP with a null Infl head in which the predicate fronts to Spec CP. The clause-initial position of the wh-word is thus part of a more general process of predicate-fronting.

The nominal clause analysis of wh-words accounts for the absence of wh-movement *per se* in the language, as well as for the absence of wh *in situ*. However, based on their interpretive properties, wh-questions must contain an operator-variable chain. I argue that the operator-variable relation arises when the subject of the nominal clause links to an A-position in a subordinate clause. This occurs in one of two ways: by means of the *kâ*-complementizer or the *ê*- complementizer (Chapter 5). If the subordinate clause has *kâ*-, the resulting structure is a relative clause which restricts the reference of the subject. This yields a cleft construction: *Who is it_i that Mary likes t_i ?* If the subordinate clause has *ê*-, the clauses are conjoined, and null-operator movement in the subordinate clause forces an anaphoric relation between the wh-word and the A-position in the *ê*- clause: *Who is he_i & OP_i Mary likes him_i.*

Having shown how Nêhiyawêwin wh-words are associated with an operator-variable chain, I then consider the consequences of the proposed analysis (Chapter 6). A defining property of wh-chains is their sensitivity to island effects. Consistent with this, there is an argument/adjunct asymmetry in Nêhiyawêwin, which in turn bears on the question of where overt arguments are positioned in a polysynthetic language. I argue that complement clauses are base-generated in an A-position, unlike overt DPs which are in an A'-position (adjoined

to IP). This explains why long-distance extraction is possible from complement clauses, while extraction from adjunct clauses is ungrammatical.

Another property of wh-chains is their sensitivity to Weak Crossover (WCO). WCO effects are absent in Nêhiyawêwin wh-questions. I argue that WCO may be avoided because there is no movement of a truly quantificational operator in the sense of Lasnik and Stowell (1991), but rather movement of a null operator. I then propose a Weakest Crossover analysis for the absence of WCO, following Demirdache (1997).

LIST OF ABBREVIATIONS

A	Argument (position)
A'	A-bar (non-argument)
agr / AGR	Agreement
conj	Conjunct prefix (complementizer)
CP	Clause Phrase (S')
DP	Determiner Phrase
dir	Direct]
fut	Future
GF	Grammatical Functions
GR	Grammatical Relations
IC	Initial Change
Infl / I	Inflection
inv	Inverse
IP	Inflectional Phrase
LF	Logical Form
NP	Noun Phrase
obv	Obviative
Op	Operator
Pass	Passive
perf	Perfective (aspect)
pl	Plural
pro	null Pronominal argument
prox	Proximate
Q	yes/no question marker
rel	relative clause marker (complementizer)
sing	singular
s.t.	something
Spec	Specifier
t	Trace
th	theme
VP	Verb Phrase
-vb-	Verbalizing suffix (on nouns)
VAI	Intransitive Verb with Animate subject
VII	Intransitive Verb with Inanimate subject
VTA	Transitive Verb with Animate object
VTI	Transitive Verb with Inanimate object
WCO	Weak Crossover

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Dedication

To my parents, Gertie and Roger Blain

Chapter 1

INTRODUCTION

1.0 Goals and Outline

This thesis has as its main goal to investigate the structure of wh-questions in Nêhiyawêwin (Plains Cree), an Algonquian language spoken in Saskatchewan and Alberta. The study is done within the framework of generative grammar, specifically within the Principles and Parameters framework of Chomsky 1981, 1986, 1995.

A wh-question is here defined as an interrogative clause which makes use of elements such as *awîna* 'who (prox)' or *awîni-wa* 'who (obv)' and *kîkway* 'what'. The examples in (1) illustrate two of the ways one can ask a wh-question:

- (1.a) *awîni-wa* Mary *kâ-wâpam-â-t*
who-obv Mary rel-see-DIR-3
Who did Mary see?
- b) *awîna* Mary *ê-wâpam-â-t*
who Mary conj-see-DIR-3
Who did Mary see?

There are three observations to be made about the surface properties of the wh-questions in (1). First, a wh-word construed with an obviative argument may show obviative agreement as in (1.a), or not, as in (1.b). Second, the wh-word is in sentence-initial position in both examples. Third, wh-questions may be marked with the *kâ*- 'Relative' complementizer as in (1.a), or with *ê*- complementizer as in (1.b).

These surface properties raise some theoretical questions. For example, how does the proximate/obviative contrast interact with the properties of the wh-construction?

Also, given that Nêhiyawêwin simple NPs are freely ordered, what is the significance of the obligatory sentence-initial position of the wh-word? Finally, although wh-questions with *kâ-* and *ê-* complementizers have the same interpretation, they have a different syntax. What are their respective syntactic structures and how does complementizer selection interact with the formation of wh-constructions?

The following chapters address these issues as follows. In Chapter 2, I discuss proximate/obviative along with the direct/inverse system, both of which are characteristic of Algonquian languages. This chapter provides background information that is essential to the arguments and analyses proposed and developed in subsequent chapters. While proximate/obviative and direct/inverse systems identify the prominence of an argument, wh-questions establish a link between a wh-word and an argument position. Consequently, understanding the factors which determine argument prominence is a necessary preliminary step for any analysis of Nêhiyawêwin wh-questions. I propose that direct/inverse marking is determined by a system of hierarchies (Silverstein 1976, Siewierska 1993): alignment of these hierarchies is marked by direct morphology on the verbal complex, and non-alignment is marked by inverse morphology. This approach provides insight into the difference of inverse vs. passive, a distinction which has been much debated in the literature (cf. Wolfart 1973, Jolley 1982, Dahlstrom 1986, Thompson 1989, Klaiman 1992). I argue that inverse signals non-alignment of the Person Hierarchy ($2 > 1 > 3$ -proximate $> 3'$ -obviative $> \dots$) with

the Grammatical Relations Hierarchy (subject/agent > object/patient). In contrast to this, passive signals non-alignment of the Syntactic Hierarchy (subject > object) with the Thematic Role Hierarchy (agent > patient).

Chapter 3 begins an in-depth look at the structure of wh-questions. There are two standard analyses of wh-constructions. Under the *in situ* analysis, the wh-word remains in an A-position at S-structure (the overt syntax), but undergoes abstract (“covert”) movement to Spec CP at Logical Form (LF). This type of analysis is adopted by Cheng (1991) for Mandarin. The overt movement analysis claims that the wh-word is base-generated in an A-position and undergoes subsequent overt movement to Spec CP. This type of analysis is adopted by Baker (1996) for Mohawk. I argue that Nêhiyawêwin wh-constructions do not involve wh-movement *per se* (either at LF or S-structure), so that neither the *in situ* nor the overt movement analysis apply. Rather, there is movement of a null operator (Op).

Chapters 4 and 5 develop and motivate my analysis of Nêhiyawêwin wh-questions. Chapter 4 develops a nominal clause analysis, which claims that all wh-words are generated in an equational structure of the type ‘*who is x*’. Because both the wh-word and the element with which it is equated are nominal, these clauses are referred to as nominal clauses. Nominal clauses with non-wh expressions are pervasive in Nêhiyawêwin: they may appear as independent clauses (Déchaine, to appear), and are also used to form focus constructions and wh-questions. In the course of motivating the nominal clause analysis, Nêhiyawêwin is contrasted with English, drawing on the work of Rapoport (1987), Heggie (1988) and Moro (1990).

Chapter 5 extends the nominal clause analysis to wh-constructions with *kâ*- clauses and *ê*- clauses. In general, wh-constructions must be licensed by operator movement -- and the operator may be overt or null. English has both overt and null operators: in (3.a), the operator-variable chain involves an overt wh-operator *who*, while in (3.b) there is a (phonologically) null operator, represented as *Op*. In both cases, the gap (= *t_i*) represents the trace of the moved operator.

(2.a) This is [the man [**who_i** [I talked to *t_i*.]]]

b) This is [the man [**Op_i** [I talked to *t_i*.]]]

I argue that operator movement in Nêhiyawêwin always involves movement of a null operator, i.e., the operator never has phonological content. I further argue that both *kâ*- clauses and *ê*- clauses host null-operator movement. *Kâ*- clauses are relative clause structures as in (3.a) which entails a cleft structure with S-structure null-operator movement. On the other hand, *ê*- clauses involve conjunction (see Blain 1995b, 1997) with LF null-operator movement creating a kind of parasitic gap structure as shown in (3.b).

(3.a) Who is it that [*Op_i* ... *kâ*- ... *t_i*]

b) Who is he & [*Op_i* ... *ê*- ... *t_i*]

The occurrence of *kâ*- complementizer in Nêhiyawêwin wh-questions and in other operator-type constructions is documented in the Algonquian literature: Wolfart (1973) and Blain (1996b) for Plains Cree; Rogers (1978) and Johns (1982) for Ojibwa; Ellis (1983) and James (1991) for Moose Cree; Reinholtz and Russell (1995) for Swampy Cree. Wh-constructions with *kâ*- clauses parallel focus constructions in that both involve a clefted

structure. The following English examples (with a copula and dummy subject *it*) illustrate this parallel:

(4.a) It is John [Op_i that [Mary kissed t_i]]

b) Who is it [Op_i that [Mary kissed t_i]]

In both the focus and wh examples, the clefted constituent is contained in a nominal clause which is generated sentence-initially: *It is John...* and *Who is it...*

As for wh-questions with *ê*- complementizer, this construction type has not, to my knowledge, been previously documented for Nêhiyawêwin (though H.C. Wolfart, p.c., acknowledges that it occurs). In this respect, the proposed analysis with *ê*- clauses as coordinate clauses containing parasitic gaps (cf. Ross 1967, Williams 1988) makes an empirical contribution to the documentation of Nêhiyawêwin question formation strategies. This is presented in Chapter 5.

Chapter 6 closes the investigation of Nêhiyawêwin wh-questions by examining constraints on null-operator movement. I show evidence that long-distance operator-extraction out of complement clauses is grammatical, as opposed to operator-movement out of adjunct islands, which is ungrammatical. On the basis of this asymmetry, I conclude that complement clauses are base generated in argument position (while overt NPs are licenced as adjuncts). Extraction is also barred from wh-islands and complex NPs, as these constitute subjacency (Ross 1967, Chomsky 1973 and subsequent work) and CED violations (Huang 1982). I also provide an account of the absence of Weak Crossover (cf. Chomsky 1976,

Koopman and Sportiche 1982, Reinhart 1983 for a discussion of Weak Crossover; Lasnik and Stowell 1991, and Demirdache 1997 for a discussion of Weakest Crossover).

1.1 Situating Nêhiyawêwin

As noted above, Nêhiyawêwin (Plains Cree) is an Algonquian language¹ -- one of five major dialects of Western Cree and often referred to as the 'Y-dialect'. This term is based on the pattern of sound correspondences which distinguishes between:

(5)	Plains Cree:	Y-dialect	niya	'I, me'
	Swampy Cree:	N-dialect	nina	'I, me'
	Woods Cree:	TH-dialect	niða	'I, me'
	Moose Cree:	L-dialect	nila	'I, me'
	---	R-dialect	nira	'I, me'

Plains Cree (Nêhiyawêwin) is spoken in Alberta and across much of Saskatchewan.

Swampy Cree is spoken in Northern Manitoba; Woods Cree occurs in a band stretching from LaRonge, Saskatchewan to Hudson's Bay (Churchill River system); Moose Cree is spoken around Moose Factory, Ontario, west of James Bay. R-dialect is spoken at Isle à la Crosse, Saskatchewan, and at the tip of James Bay in Ontario and Quebec (Tête-de-Boule Cree).

(See the map in Wolfart 1973 for details.)

¹ Other Algonquian languages include Ojibwa (spoken in various dialects throughout Ontario, and in Minnesota); Blackfoot in Alberta; the languages of the Innu peoples of Quebec/Labrador (Eastern Cree); Micmac in New Brunswick; and many other language groups in the USA, i.e., Fox, Menomoni, Cheyenne, Malaseet and Passamaquoddy (in Maine).

1.1.1 The Consultants

The data for this thesis is from four main Nêhiyawêwin speakers: Jane Tipewan (J), Bill Sewepagaham (B), Donna Paskemin (D), and Mary Ann Palmer (MA).² There were also a few examples elicited from a group of three women in a single session: Theresia Boysis, Evelyn Enright, and Leona Martin (who are represented as LET).

Of my main consultants, Jane and Bill were the oldest -- about 50 years. Mary Ann is in her mid-40s and Donna was the youngest in her early 30s. Bill is a school principal who was born in the Lesser Slave Lake region of Northern Alberta. Jane lives on the Wichikan Lake R. near Spiritwood, Saskatchewan. Donna is a Cree teacher who is originally from Sweetgrass R. near North Battleford, Saskatchewan; and Mary Ann is originally from Little Pine R., also near North Battleford. The data elicited represents subdialects of Plains Cree (Nêhiyawêwin) based on regional differences, both areal (Northern Alberta vs Western Saskatchewan), and age related.

It should also be noted that my contact with these four speakers was sequential:

(6)	Jane (50)	Spiritwood, Sask.	Summers of 1992 and 1993
	Bill (50)	UBC	Nov. 1992 to July 1994
	Donna (30s)	UBC	July 1994 to May 1995
	Mary Ann (40s)	UBC	Jan. 1996 to April 1997

² The letters shown in parentheses are used to identify them with respect to elicited examples; i.e., B.245 identifies sentence No. 245 elicited from Bill.

As a result, it was not possible to verify, complete paradigms, and otherwise more closely investigate and contrast some of the data gathered at much earlier periods of my research. This invites further investigation in many areas.

The data was collected primarily via translation of sentences elicited in English and to a lesser degree by means of Nêhiyawêwin sentences composed by the investigator. In the latter situation, the consultant was often asked to gloss my Nêhiyawêwin sentences into English; and this produced quite different results in some cases (see discussion in Chapter 6).

1.1.2 The Literature

Although the descriptive work done on Algonquian languages in the Bloomfieldian and functionalist frameworks is vast, as attested by the extensive bibliography of Pentland and Wolfart (1982), work in the generative framework is just beginning. The contributors in this framework include Blain (1995a, 1997) on Plains Cree; Brittain (1995) on Sheshâshît Montagnais (Eastern Cree); and Campana (1996) on the conjunct order in Algonquian languages. Dahlstrom (1986) gives an LFG account of the role of the lexicon in the syntax of Plains Cree verbs; and Grafstein (1984, 1989) looks at argument structure and disjoint reference in Ojibwa. Déchaine (1996, 1997a, 1997b) is working on Plains Cree morphology and nominal predication, while Bar-el (1997) and Hirose (1997) examine binding conditions and inchoatives respectively. See also McGinnis (1996) on Ojibwa; Reinholtz and Russell (1995) on quantificational NPs in Swampy Cree, and also Russell and Reinholtz (1995),

(1996). Earlier work in the generative includes Frantz (1976, 1978, 1979) which deal primarily with Blackfoot.

The generative work previously done on Nêhiyawêwin (Plains Cree) (see Dahlstrom 1986) has been based primarily on textual evidence, i.e., on the naturally-occurring forms of the language which are found in published stories. The occurrence of wh-questions in these texts is rare, and there has been no work done in this area at all. Grammars (i.e., Wolfart 1973) also provide a minimum of descriptive information in this respect. In Ojibwa and the other Cree dialects, there are two people who have worked on relative clauses and, to some extent, on wh-questions. James (1991) looks at the use of a set of Moose Cree preverbs (i.e., the complementizers) in conjunction with relative clauses and wh-questions. Johns (1981, 1982) looks at relative clauses and (briefly) at wh-questions in Ojibwa; she claims (1982) that wh-words are clefted in that language. Reinholtz and Russell (1995) make the same claim for Swampy Cree; however, in neither case do they consider the consequences of such a proposal in any detail.

1.2 Situating the Theory

In order to proceed with the investigation of the properties of wh-questions in Nêhiyawêwin, it is necessary to introduce some of the background assumptions that I will be making about the clausal structure and the architecture of the theory. There are four areas that are particularly relevant to the study of wh-expressions. First, given that the wh-words that we will be looking at are wh-NPs, the first question that arises is how ordinary NPs link to

clauses (Section 1.2.1). Another issue involves the status of *kâ-* and *ê-* as complementizers (Section 1.2.2). Third, given that *wh*-words generally co-occur with verbal clauses, I introduce the basic clause structure that I assume for Nêhiyawêwin (Section 1.2.3). A fourth point concerns the organization of the theoretical model that I adopt, in particular the distinction between (overt) S-structure movement and (abstract) movement at Logical Form (Section 1.2.4).

1.2.1 Lexical DPs are Adjoined

I am assuming that arguments of a verb are never in argument position but are adjoined. Nêhiyawêwin sentences mark agreement on the head (i.e., the verb). This will explain why NPs are optional, and also the freedom of word ordering. These properties are characteristic of head-marking languages (Nichols 1986); that is, languages in which strong agreement morphology on the verb is used to express grammatical relationships.

The prohibition against NPs in argument position of a verb could be the result of two quite different properties of a language. This could be a result of the Pronominal Argument Hypothesis which states that rich agreement on the verbs identifies and licenses *pro* in argument positions. This is the claim of Reinholtz and Russell (1995) for Swampy Cree. Then the overt NPs are adjoined to IP (Baker 1996) and licensed by coindexation with a *pro* in argument position.³ On the other hand, Nêhiyawêwin could be a language with obligatory A'-scrambling out of argument positions (cf. Mahajan 1990). It is not within the scope of

³ Baker's proposal is based on earlier work by Jelinek (1984) and Hale (1983).

this work to address this issue. In the meantime, I adopt the first of these two proposals which has *pro* occurring in A-positions licensing (optional) adjoined NPs (i.e., the Pronominal Argument Hypothesis).

The following subsections show that, in Nêhiyawêwin, the morphological properties of the verbal clause and the syntactic properties of overt NPs are at least consistent with this assumption. I first illustrate how rich agreement identifies a null pronominal (*pro*) in argument position (Section 1.2.1.1). Then I show that Nêhiyawêwin has the three properties identified by Baker (1996) as being characteristic of languages with pronominal arguments: optional use of NPs (Section 1.2.1.2), free ordering of NPs (Section 1.2.1.3), and the occurrence of discontinuous nominal expressions (Section 1.2.1.4).

1.2.1.1 *Pro* in Argument Position

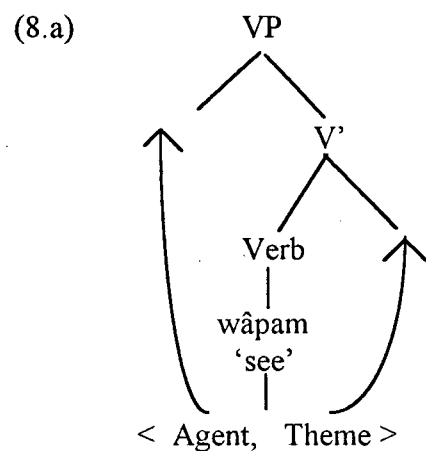
Consider the following Nêhiyawêwin sentence, which involves a single word, a complex verb (as is typical in head-marking languages). In (7), the *ni-* prefix represents the first-person (the subject, in this case) and the suffixes tell us that the object is third-person; i.e., the *-â* ‘direct’ morpheme tells us that the subject is the higher (1st) person and *-w* represents ‘third person’ (object) (see discussion of Person Hierarchy in Chapter 2).⁴

- (7) *ni-wâpam-â-w*
 1 -see -dir-3
 I see him/her.

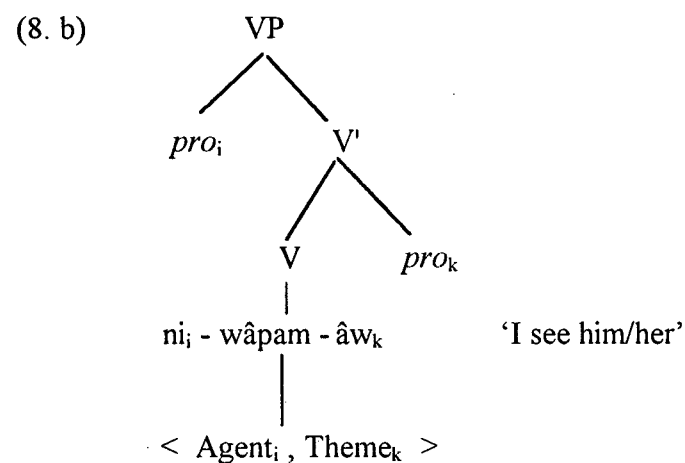
⁴ The *ni-* (or *ki-*) prefix occurs whether that person is subject or object of the verb (providing the other argument is 3rd-person).

For this single word with rich agreement, we can propose a sentence structure as shown

(8). In (8.a), the verb has an argument structure with thematic roles for two argument positions, an Agent assigned to the Spec VP position, and a Theme assigned to the complement (sister) position of the verb.



The agreement morphology on the verb identifies the arguments, i.e., first person subject and third person object. In the absence of overt NPs, the agreement morphology licences (empty) pronominal arguments in subject and object positions, as shown in (b).



This establishes that overt NPs are not required in a sentence. What, then, are the properties characteristic of NPs when they do occur?

1.2.1.2 Optionality of NPs

As mentioned above, one of the properties of head-marking languages such as Nêhiyawêwin is that overt NPs are optional. This is illustrated in (9), where both arguments are third-person. Example (9.a) is a complete sentence as shown by the gloss; the inflectional morphology provides pronominal referents.⁵

- (9.a) wâpam-â-w
see-dir-3
He saw her (obv).
- b) wâpam-â-w Mary-wa
see-dir-3 Mary-obv
He saw Mary (obv).
- c) John wâpam-â-w
John see-dir-3
John saw her.
- d) John wâpam-â-w Mary-wa
John see-dir-3 Mary-obv
John saw Mary (obv).

⁵ Overt pronouns, when they occur, serve an emphatic function only. Dahlstrom (1995) claims for Fox that an emphatic pronoun introduces a new topic. In Nêhiyawêwin, this would be restricted to *niya* 'I, me' and *kiya* 'you'. Third-person *wiya* is further restricted. In Blain (1994, 1995a) I argue that *wiya* functions primarily as a topic-sensitive intensifier.

Overt NPs may be used as shown in examples (9.b) to (d); however, they are optional and serve as referential antecedents for the pronominal arguments identified in the verbal inflectional morphology.

The optionality of NPs can be taken as evidence that the argument positions are saturated, i.e., the verb has discharged its thematic roles and its case features. Under this analysis, when NPs do occur, they cannot be occupying an argument position. According to Baker (1996), this is because an NP in argument position would need to be assigned Case, but the agreement markers on the verb have already absorbed the Case features. This forces lexical NPs to occupy non-argument positions, and specifically to be adjuncts of the clause.

1.2.1.3 Free Word Order

In addition to being optional, when lexical NPs do appear, they are freely ordered (cf. Blain (1992, 1993); Dahlstrom (1986); Wolfart (1973, 1996)):

- | | | | |
|--------|--|--------------|-----|
| (10.a) | John ê-wâpam-â-t | o-mama-wa | SVO |
| | John conj-see-dir-3 (3>3') | 3-mother-obv | |
| | John he saw her | his mother | |
| | John _i saw his _i mother. | B.1037 | |
| b) | John o-mama-wa ê-wâpam-â-t | SOV | |
| c) | ê-wâpam-â-t o-mama-wa John | VOS | |
| d) | ê-wâpam-â-t John o-mama-wa | VSO | |
| e) | o-mama-wa ê-wâpam-â-t John | OVS | |
| f) | o-mama-wa John ê-wâpam-â-t | OSV | |

All of these word orders are also evidenced in texts (cf. Dahlstrom (1986) for Nêhiyawêwin/Plains Cree).⁶

Inasmuch as adjuncts are more freely ordered than arguments, the free ordering of NPs is consistent with the claim that they are licensed as adjuncts rather than as arguments.

1.2.1.4 Discontinuous Constituency of NPs

A third claim about overt NPs is that they involve discontinuous constituency (cf. for example, Reinholtz and Russell (1995)). Contrast the deictic DPs in (11.a) and (b). In (a), the two words are continuous and form a single constituent DP. In (b), the deictic *anihi* 'those' precedes the verbal constituent while the coreferent nominal *awâsis-ak* 'children' follows the verb.

(11.a) ê-wâpam-â-t-ik [anihi awâsis-ak]
conj-see-dir-3-pl those child-pl
He saw those children.

b) [anihi] ê-wâpam-â-t-ik [awâsis-ak]
those conj-see-dir-3-pl child-pl
He saw those children.

Reinholtz and Russell (1995) present the same kind of evidence for Swampy Cree. I also refer the reader to Baker's Chapter 2 which shows this type of evidence for Mohawk.⁷

⁶ NP ordering in Algonquian languages, although free, is sensitive to discourse-related factors, cf. Tomlin and Rhodes (1992) for Ojibwa, Starks (1993) for Woods Cree, and Dahlstrom (1995) for Fox.

⁷ Another possibility is that they form distinct nominal constituents -- possibly occurring in separate clauses. For discussion of related issues, see Déchaine's (to appear) analysis of

Another example of discontinuous constituency involves a possessor NP, as in (12.a).

Note that Nêhiyawêwin has a second-position Yes/No Q-particle *ci*. In (12.b), the Q-morpheme separates the possessor *Bill* from the possessee *o-wicêwâkan-a* 'his friend'.

(12.a) Bill o-wicêwâkan-a ê-wîcih-iko-t
Bill 3-friend-obv conj-help-inv-3
Bill's friend helped him. cf.J.252

b) Bill *cî* o-wicêwâkan-a ê-wîcih-iko-t
Bill Q 3-friend-obv conj-help-inv-3
Did Bill's friend help him? J.252

To summarize, I have established that Nêhiyawêwin has the hallmark properties of a head-marking language. Rich agreement morphology identifies null pronominals (*pro*'s) in argument position. As for overt NPs, they display the following three properties: they are optional, they are freely ordered, and they may be discontinuous. These then are the baseline properties of ordinary NPs. As we shall see in subsequent chapters, the distribution of wh-NPs differs from that of lexical NPs.

1.2.2 Complementizer Selection

Wh-words occur most commonly with *kâ*- clauses or with *ê*- clauses as shown in (13).

(13.a) awîni-wa Mary *kâ*-wâpam-â-t
who-obv Mary rel-see-dir-3
Who did Mary see?

predication in nominal clauses. Baker (1996) also discounts an analysis for discontinuous constituency in Mohawk NPs.

- b) awîni-wa Mary ê-wâpam-â-t
 who-obv Mary conj-see-dir-3
 Who did Mary see?

I analyze *ê-* and *kâ-* as complementizers. In Wolfart (1973:45 ff.) they are referred to as Conjunct Markers (following Bloomfield 1928, Ellis 1971). However, Wolfart notes that the "changed conjunct" forms in *ê-* and *kâ-* mark subordination and attributes to them meanings such as those shown in (14):⁸

- | | |
|---|---|
| (14.a) <i>ê</i> -wâpam-â -t
conj-see -dir-3
'(that) he saw him' | b) <i>kâ</i> -wâpam-â -t
rel-see -dir-3
'(the one) that he saw'
'(one one) that saw him' |
|---|---|

The complex verb forms in (14) are derived by head movement in the syntax. The complementizer morphemes precede tense/aspect markers such as *kî-*, as shown in (15).

⁸ The term "changed conjunct" refers to Initial Change. The counterpart of Nêhiyawêwin *ê-* in Ojibwa and other related languages (including Potawatomi discussed below) is Initial Change (IC) -- a morphophonological constituent which consists of a pattern of ablaut of the first vowel of the stem (cf. Rogers 1978). Wolfart (1973) proposes that *ê-* (underlyingly /i/ + IC) in Cree languages is just a "vehicle" for the IC process. The *kâ-* complementizer in Nêhiyawêwin does not occur in ordinary declarative sentences but is restricted to operator environments, occurring in wh-questions, focus constructions and relative clauses.

In contrast, there are two *kâ-* complementizers in the Moose Cree dialect (D. James 1991 and p.c.; Clarke et al 1993). In relative clause (null) operator environments, *kâ*₋₁ is a frozen form historically derived from IC on Proto Algonquian **kîwî-* 'go around doing X' (Clarke et al 1993 -- attributed to Ives Goddard). This *kâ*₋₁ complementizer occurs in all tenses together with the appropriate tense/aspect marker. In wh-questions, the operator movement appears to be contained in the synchronic IC process -- which in past tense operates on underlying /*kî-*/ 'past tense' + IC to produce *kâ*₋₂ (restricted to past tense). Nêhiyawêwin, on the other hand, has grammaticalized the IC process in the form of overt complementizers *ê-* and *kâ-*. In other words, in my analysis, there is only one *kâ-* in Nêhiyawêwin -- which occurs in both relative clauses and wh-questions (see discussions in Appendix D).

Inasmuch as *kî-* is introduced at the IP level, this ordering is consistent with the hypothesis that *ê-* and *kâ-* occupy a Comp position above the IP projection -- assuming (as in Baker 1985) that the order of morphemes reflects the hierarchical architecture of the clause (see next section).

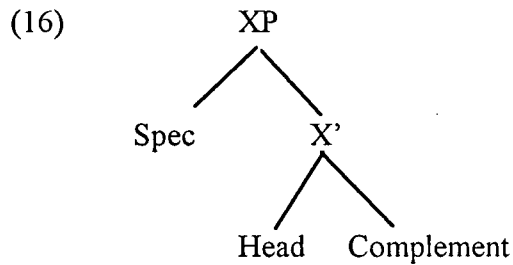
- | | |
|---|---|
| <p>(15.a) ê -<i>kî-wâpam-â</i> -t
 conj-perf-see-dir-3
 '(that) he saw him'</p> | <p>b) kâ-<i>kî-wâpam-â</i> -t
 rel-perf-see -dir-3
 '(the one) that he saw'
 '(one one) that saw him'</p> |
|---|---|

Theoretical considerations also support a complementizer analysis for this position.

Halle and Marantz (1993) discuss the independent vs. conjunct order in Potawatomi (another Algonquian language). In that language, there is no overt equivalent of *ê-* (see fn. 8) so that there is no overt COMP in either independent or conjunct modes. The evidence for the independent vs. conjunct modes consists of two patterns for negation and two paradigms of agreement morphology. In their analysis, Halle and Marantz (1993:147ff.) propose a (non-overt) COMP in a functional projection higher than the tense/Infl projection which selects for the independent vs. conjunct paradigm.

1.2.3 The Structure of Clauses

Following Kayne (1994), I propose that in Nêhiyawêwin all projections are head-initial and specifier-initial, giving a uniform Specifier-Head-Complement ordering as in (16):



This structure is consistent with the relative ordering of morphemes in the verbal complex. For example, as just discussed in the previous subsection, the complementizers *kâ-* and *ê-* appear as proclitics on the verbal complex. This accords with the claim that the CP projection is head-initial. Similarly, tense and aspect markers precede the verb stem, e.g., the future marker *wî-* in (17). This is also consistent with the idea that the IP projection is head-initial.

(17.a) **ni-wî-wâpam-â-w**
 1 -fut-see -dir-3
 'I will see him.'

b) **ni-wî-wâpam-ik(o-w)**
 1 -fut-see -inv-(3)
 'He will see me.'

The verbs in (17) are in the Independent mode which involves both prefixal person agreement and suffixal number agreement. The person prefixes (*ni-* '1st person', *ki-* '2nd person, and \emptyset '3rd person') are positioned before tense/aspect prefixes, and can be analyzed as occupying the specifier position of IP. The person markers which occur in the verbal paradigm parallel the personal pronouns:⁹

⁹ See also Halle and Marantz (1993:150) who analyze these person-markers in Potawatomi as clitics.

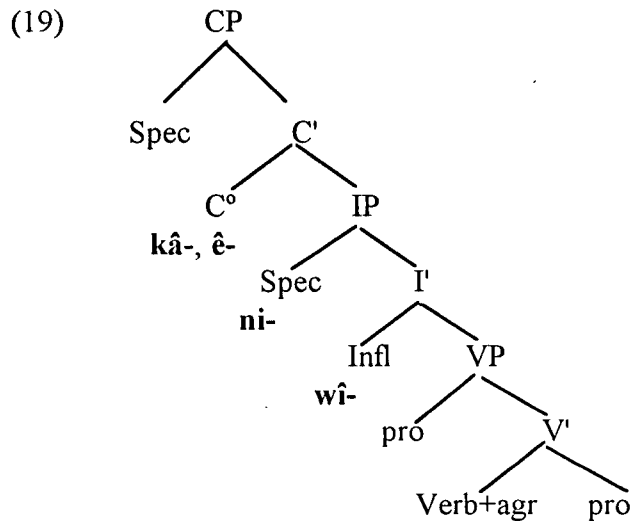
(18) **Pronominal Paradigm**

1sg	<i>niya</i>	'I, me'
2sg	<i>kiya</i>	'you'
3sg	<i>wiya</i>	's/he, him/her'
1pl	<i>niya-nân</i>	'we (excl.)'
2.1pl	<i>kiya-naw</i>	'we (incl.)'
2pl	<i>kiya-wâw</i>	'you all'
3pl	<i>wiya-wâw</i>	'they'

Verbal Paradigm

<i>ni-nikamo-n</i>
<i>ki-nikamo-n</i>
\emptyset -nikamo-w
<i>ni-nikamo-nân</i>
<i>ki-nikamo-(nâ)naw</i>
<i>ki-nikamo-(nâ)wâw</i>
\emptyset -nikamo-wak

The internal structure of the CP and IP projections are represented in the structure in (19):



As (19) illustrates, the *ni-* '1st person' prefix occupies Spec IP preceding tense/aspect markers (e.g. future *wî-*), and following Comp. Note, finally, that the arguments of the verb are base-generated in VP-internal positions as null pronominals (*pro*'s) whose contents are identified by the agreement morphology on the verb.¹⁰

¹⁰ This oversimplifies the matter. Note that prefixal person agreement is limited to the independent mode and does not occur with an overt Comp. Conversely, the complementizers *kâ-* and *ê-* occur only in the conjunct mode, which is associated with suffixal person agreement.

1.2.4 Levels of Representation: S-structure and Logical Form

Within the model that I am assuming, there are two levels of representation in the syntax: S-structure and Logical Form (LF). In principle, movement of a wh-word can take place at either of these levels. As discussed above, there are two types of Nêhiyawêwin wh-questions, those with *kâ-* complementizer and those with *ê-* complementizer, and both involve movement of a null-operator. All things being equal, one might expect that movement of a null-operator can take place at S-structure or at LF. It is clear that complementizer *kâ-* occurs only in operator environments. Complementizer *ê-* occurs elsewhere -- but including in wh-questions (an obligatory operator environment). (Note that *ê-* never occurs in relative clauses or focussed NP constructions which require operator movement at S-structure.¹¹ I shall argue that, with *ê-* clauses, null-operator movement takes place at Logical Form.

Having motivated these background assumptions for Nêhiyawêwin, I now turn to the question of how the verbal agreement morphology codes argument structure. This is necessary for two reasons: (i) to understand the significance of the morphology in wh-constructions (which will be crucial in later chapters), and (ii) to illustrate how the proximate/obviative contrast interacts with other person agreement morphology.

¹¹ In other words, there must be some form of overt (S-structure) evidence for relative clauses in a language where NPs are optional.

Chapter 2

HIERARCHIES AND ALIGNMENT CONDITIONS

2.0 Introduction

In this chapter, we will look at the reference-tracking system which is characteristic of Algonquian languages. Two contrasts are coded in the inflectional morphology. These are:

- (i) The proximate vs. obviative status of the third-person arguments, the contrast evidenced in the presence or absence of suffix *-(w)a* 'obviative' on NPs, including *wh*-words. The proximate third person is the more salient or topic-like third person. A third person discourse topic must be proximate, represented as [3]. On the other hand, obviative marks a less salient, non-topic third person, represented as [3'].¹ See examples in the table in (3).
- (ii) The direct vs. inverse marking determines which of the two participants is the agent/actor; this is represented (in the examples below) by the suffixes *-â/-i* 'direct' and *-iko/-iti* 'inverse' on the verbs.

These systems are represented in the examples which follow. In all the examples, the agreement morphology indicates that there are two third persons involved. The *â-* 'direct' marker in (1.a) indicates that the 3-proximate person is subject and the 3'-obviative person is

¹ The proximate/obviative distinction in the hierarchy is sometimes referred to as 3rd-person (3) vs. 4th-person (3') distinction. Some grammars even refer to a 5th person (3'') (cf. Ellis (1983) and Wolfart (1973)).

object. In (b), the *iko-* 'inverse' suffix indicates that the 3'-obviative person is subject and the 3-proximate person is object.

(1.a) John ê-wâpam-â-t **Mary-wa**
 John conj-see-dir-3 Mary-obv
 John (prox) saw Mary (obv).

b) **John-a** ê-wâpam-iko-t Mary
 John-obv conj-see-inv-3 Mary
 John (obv) saw Mary (prox).

Wh-words are also marked for the proximate/obviative distinction, as seen in (2):

(2.a) awîna ê-wâpam-â-t **Mary-wa**
 who conj-see-dir-3 Mary-obv
 Who (prox) saw Mary (obv).

b) **awîni-wa** Mary ê-wâpam-â-t
 who-obv Mary conj-see-dir-3
 Who (obv) did Mary (prox) see.

These two morphological systems -- i.e., proximate/obviative and direct/inverse -- operate in conjunction with a third system, the person hierarchy. This hierarchy ranks persons and governs the use of the direct/inverse morphology in the clause. Generally, action by a higher-ranked person on or toward a lower-ranked person is direct. Actions in which the lower-ranked person is the agent are marked inverse.

Given that wh-phrases and NPs are both marked for the proximate/obviative contrast and these morphological systems are an integral part of wh-questions as well as declarative sentences, we must understand how they function in the language. I propose that the interaction of the proximate/obviative distinction with direct/inverse marking is the by-product of how certain hierarchies align (or fail to align) with each other.

It is necessary to provide a more thorough account of the systems which mark the binding relations within a clause -- not only to accustom the reader to the various patterns involved within the clause, but also to observe how the systems function together to provide reference-tracking information in a larger sentential context. This information will be relevant to the investigation of wh-questions insofar as wh-words, as NPs, also bear morphology for obviation and participate in the systems described here.

2.1 Hierarchies and Alignment Conditions

The reference-tracking morphology is sensitive to three sets of contrasts:

- (i) the proximate/obviative distinction
- (ii) the direct/inverse distinction
- (iii) person distinctions: speaker (1st person), hearer (2nd person), other (3rd person)

In the first (i.e., proximate/obviative), it is the obviative which is the marked status with suffix $-(w)a^2$ on animate NPs.

(3.a) Proximate 3-person (unmarked) Obviative 3'-person (marked)

Mary		Mary- wa	
nâpêw	'man'	nâpêw- a	'man (obv)'
sîsîp	'duck'	sîsîp- a	'duck (obv)'
atim	'dog'	atimw- a	'dog (obv)'
awîna	'who'	awîni- wa	'who (obv)'

² The *-wa* form typically occurs with vowel-final stems while *-a* is used for consonant-final stems. There are some consonant-final words like *atim* 'dog' which have the plural form *atimw-ak* and the obviative form *atimw-a* which are analyzed as being underlyingly */atimw-/* (cf. Wolfart 1973).

3.b) Possessor NPs:

Proximate 3-person (unmarked)	Obviative 3'-person (marked) ³
ni-mosôm 'my grandfather'	o-mosôm-a 'his grandfather'
ni-mâmâ 'my mother'	o-mâma-wa 'his mother'

In addition to the evidence with respect to NPs above, the proximate/obviative status of arguments is also indicated in the inflectional morphology of verbs and with possessor agreement on NPs.

The second contrast relevant to reference-tracking morphology is direct/inverse marking. This marking occurs only with transitive verbs involving animate arguments. The direct/inverse system designates which of the two participants is the agent in the event denoted by the verb.

These systems (proximate/obviative and direct/inverse) operate in conjunction with a third system, the Algonquian person hierarchy.⁴ Generally, action by a higher-ranked person on or toward a lower-ranked person is direct. Actions in which the lower-ranked person is the subject are marked inverse.

(4) Person Hierarchy:

2	>	1	>	3	>	3'	>	3''	>	0	>	0'
<Subj/Agent> Action ----->				<Obj/Patient>				= DIRECT				
<Obj/Patient> <----- Action				<Subj/Agent>				= INVERSE				

³ Information about the proximate/obviative status of inanimate NPs is restricted to the verbal morphology. Obviative status is not marked on inanimate NPs. See Appendix B for an outline of the proximate/obviative contrast in conjunction with gender and related issues in Nêhiyawêwin.

⁴ See Silverstein (1976) and Siewierska (1993).

The numbers representing third-persons in the hierarchy are based on conventions in Wolfart (1973), Wolfart and Carroll (1981), and Ellis (1983);⁵ for example:

2 = second person	3"=third person further obviative
1 = first person	0 = third person proximate inanimate
3 = third person proximate (animate)	0'= third person obviative inanimate
3'= third person obviative	

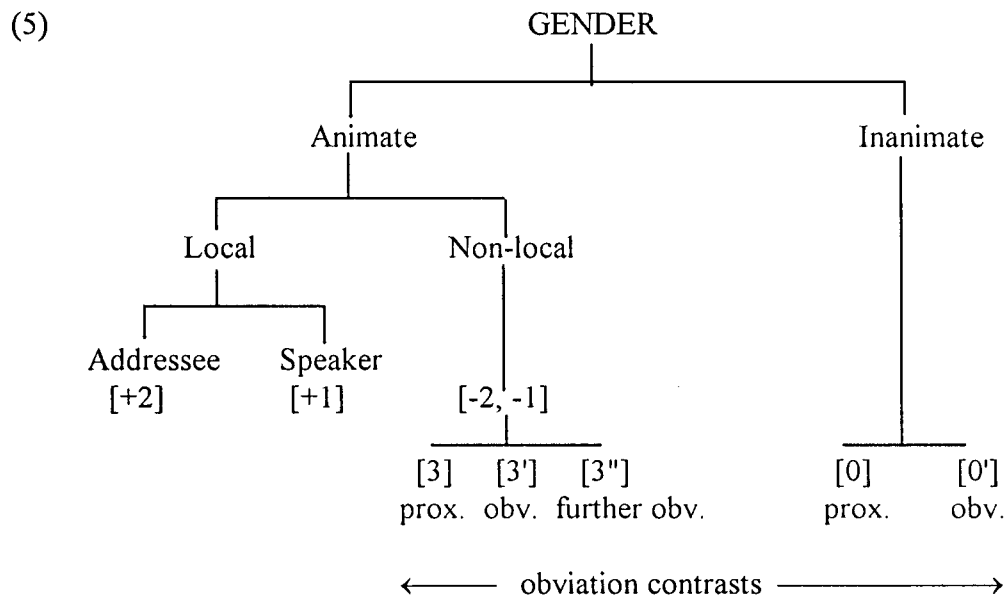
For example, consider a situation with two animate participants, the hearer and the speaker (the so-called You & Me forms). If a transitive verb has a 2nd-person participant acting on a 1st-person participant, then the morphology will show that the verb is Direct. If the person hierarchy is violated, i.e., if the 1st-person participant is acting on the 2nd-person participant, then the verb will be morphologically-marked as Inverse. This system operates throughout the hierarchy including the relation between proximate and obviative third persons.

As seen in (4), objects of inanimate gender are lowest on the hierarchy. Déchaine (1996 based on Hockett 1966) schematizes the person hierarchy as in (5).⁶ The term local (from Hockett (1966)) refers to the speech act participants, i.e., you and me. Non-local refers to all others, i.e., third-persons, which are further distinguished in the proximate/obviative contrast. This distinction plays a role not only in the reference-tracking system but

⁵ The proximate and obviative terminology itself has a long tradition in the Algonquian literature, i.e., it is used in works like Bloomfield (1946), Hockett (1966), etc.

⁶ Note that an obviation contrast exists only with third-persons in Nêhiyawêwin. However, Déchaine observes that the independent personal pronoun system of Blackfoot (a neighbouring Algonquian language cf. Frantz 1991:74) has two singular forms for first and second persons -- with suffixes which correspond to the proximate with *-wa* and obviative with *-yi*. Unexpectedly, there is only one form (with the *-yi* suffix) for the singular third-person pronoun.

also in discourse. First we will consider the characteristic features of proximate and obviative.



Proximate status is morphologically unmarked. In a possessor phrase (see (3.b)), a third-person possessor is proximate while the person/thing possessed is obviative. In a clause containing two third-person arguments, it is the subject which typically has proximate status.⁷ In a given span of discourse with more than one third person, proximate status is assigned to only one of them -- all the others being obviative. The proximate third person constitutes the discourse topic for that span of the discourse. In other words, the discourse topic (if third person) must be proximate.⁸ Proximate status can be reassigned to another third person to reflect a change in topic status.

⁷ The subject is usually considered to be the unmarked sentential topic (cf. Erteschik-Shir 1993).

⁸ The discourse topic is the main participant in a section of a story/discourse which spans at least one sentence. This person is assigned proximate status -- all other third persons being marked

Obviative third persons are morphologically marked with the suffix $-(w)a$. The obviative NP is typically the possessed NP in a phrase with a third-person possessor and the object of a verb in a clause with two third-person arguments. The discourse topic cannot be obviative.

2.1.1 Hierarchies

In Siewierska's (1993) Hierarchy of Hierarchies, there are three categories of hierarchies which she ranks as: Familiarity > Dominance > Formal. These larger categories may range over a sub range of hierarchies as follows:

- i) Familiarity: topicality > givenness > definiteness/referentiality
- ii) Dominance: a) person: 1 > 2 > 3
 human > animals > other organisms
 b) semantic role: agent > patient > recipient
- iii) Formal: a) structure: simple > complex
 b) length: short > long

Very briefly, as noted in Siewierska (1993:831), these Linearization Hierarchies ("X > Y") may be understood as showing a preference for X to precede Y. Leftward placement is related to *familiarity* = *subjectivity* (Benveniste 1971), = *empathy* (Kuno 1976, 1987), = *focus of interest* (Zubin 1979), = *viewpoint* (DeLancey 1981), = *point of view, perspective*. Subjectivity is defined in Lyons (1982:101) thus: "The term 'subjectivity' refers to the way in

obviative -- and this status is reflected in the proximate/obviative marking of verbs in a series of sentences until the proximate status is reassigned to some other third-person in the discourse.

which natural languages, in their structure and normal manner of operation provide for the locutionary agent's expression of himself and of his own attitudes and beliefs."

The hierarchies relevant for the discussion at hand are those that concern familiarity and dominance. Hierarchies represent higher-order generalizations about the relative ranking or salience of a natural class of linguistically significant terms. For example, grammatical functions (GFs) such as "subject", "object", and "oblique" constitute a natural class. It is generally agreed that there is a sense in which "subject" is the most salient GF; and that, amongst the non-subject GFs, "object" is more salient than "oblique". This can be represented as a ranked list, with " $X > Y$ " to be read as "X outranks Y" or equivalent "X is more salient than Y". Thus, a GF hierarchy would appear as in (6).

(6) Grammatical Function Hierarchy:

Subject > Object > Oblique ...

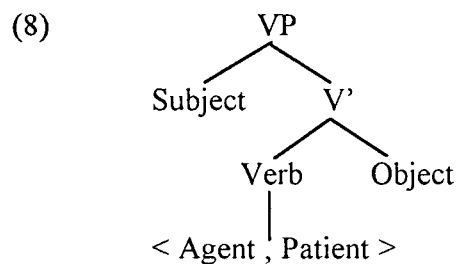
As indicated by "...", whether these three terms exhaust the GF hierarchy remains an open question.

Another hierarchy that is often invoked is the Semantic Role Hierarchy (also called the Thematic Hierarchy or the θ -Hierarchy), which starts with the observation that roles such as "agent", "patient" and "goal" are not randomly assigned: agents are more likely to be subject, patients are more likely to be object, and so on. This can be understood as being the effect of a ranking of semantic roles, as in (7). Again, note that the actual number of terms which constitute this hierarchy are subject to debate.

(7) Semantic Role Hierarchy

Agent > Patient > Goal ...

This chapter looks at the properties of transitive verbs, i.e., verbs with two arguments, which project a structure as in (8). With respect to Grammatical Functions, the subject is structurally more prominent than the object inasmuch as it c-commands the object. (The subject in (8) is represented as being in Spec VP on the assumption that all arguments are contained within the lexical projection of V.) As for Semantic Roles, the agent role is more prominent than the patient role and therefore is linked to a more prominent argument position.



Henceforth, I use the term Grammatical Relations (GR) Hierarchy as a cover term to refer jointly to the GF Hierarchy and the Semantic Role Hierarchy. Accordingly, I will often refer to subject/agent as outranking object/patient -- representing an active sentence.

In addition to the GR Hierarchy, Nêhiyawêwin (and Algonquian languages in general) also exploit hierarchies based on discourse prominence, gender and person in the verbal morphology. In the Participant Hierarchy in (9), the Discourse and Gender hierarchies represented in (a) and (b) are in conjunction with the general Person hierarchy in (c):

(9) **Participant Hierarchies:** (cf. Hockett (1966) for example)

- a) Discourse Prominence: proximate > obviative
- b) Gender: animate > inanimate
- c) Person: $2 > 1 > 3 > 3' > 0 > 0'$

In a clause with two third-person participants, proximate status is assigned to the subject/agent in the unmarked case, while the object/patient is obviative -- as predicted by the Discourse Prominence hierarchy in (a).

The Gender hierarchy in (b) is reflected in the morphological agreement between transitive verbs. A transitive verb with an animate object shows agreement for both arguments. If the object is inanimate, there is only subject agreement.

- (10) a) TA Verb (animate object): S_{agr} O_{agr}
 b) TI Verb (inanimate object): S_{agr} --

The Person Hierarchy in (9.c) is a complex system with many sub-parts. The contents of (9.c) are unpacked in the configurations in (11), where "X > Y" indicates that the person-value of X outranks the person-value of Y.

- (11) **Person:** **person X > person Y**
- | | | |
|------------|-----------|---------------------------|
| Local: | $2 > 1$ | (hearer) > (speaker) |
| Mixed: | $2/1 > 3$ | (local) > (non-local) |
| Non-local: | $3 > 0$ | (animate) > (inanimate) |
| Animate: | $3 > 3'$ | (proximate) > (obviative) |
| Inanimate: | $0 > 0'$ | |

If the subject/agent is higher on the Person hierarchy than the object/patient, then the verb is marked direct. If the object/patient is higher on the Person hierarchy than the subject/agent, then the verb is inverse. So, what precisely does the direct vs. inverse morphology do?

Direct and inverse morphemes are referred to in the Algonquian literature as "theme markers". They have two functions: the first is to identify one of the arguments of the verb. For example, if an action involves local speech act participants, i.e., the speaker and the hearer, then the direct/inverse theme markers are chosen from the *-i/-iti* set. If the action involves a non-local person, i.e., a third person, then the direct/inverse theme markers are chosen from the *-â/-ikw* set.

(12) Direct/Inverse markers

- | | | |
|----|---------------------|--|
| a) | Local (2 & 1): | Direct = /-i/
Inverse = /-iti/ |
| b) | Mixed (2/1 & 3): | Direct = /-â/
Inverse = /-ikw/ |
| c) | Non-local (3 & 3'): | Direct = /-â/ (-ê/ in Ind)
Inverse = /-ikw/ |

Secondly, the theme marker locates the two arguments in relation to one another in the Person hierarchy and also locates the two arguments in relation to the GR hierarchy. If direct, then the higher person is the subject/agent. If inverse, then the higher person is the object/patient. This will be discussed in more detail in the following sections.

In order to account for the direct/inverse contrast, I propose the following Alignment Conditions:

(13) Alignment Conditions

- a) When the verb is marked DIRECT, the Person hierarchy (2>1>3>3'>0>0') and the Grammatical Relations hierarchy (subject/agent > object/patient) are aligned.
- b) When the verb is marked INVERSE, the Person hierarchy (2>1>3>3'>0>0') and the Grammatical Relations hierarchy (subject/agent > object/patient) are not aligned.

In other words, the direct/inverse contrast captures the alignment vs. non-alignment of two dominance hierarchies -- the Person hierarchy and the GR hierarchy.⁹ Alignment and non-alignment are defined as follows:

(14.a) Alignment:

Given two hierarchies α and β , each associated with a ranked ordering of elements, then the two hierarchies are aligned if a given pair of elements X and Y has the same relative ranking on both hierarchies (i.e., either $X>Y$ in both hierarchies or $Y>X$ in both hierarchies).

b) Non-alignment:

Given two hierarchies α and β , each associated with a ranked ordering of elements then the two hierarchies are not aligned if a given pair of elements X and Y does not have the same relative ranking on both hierarchies (i.e., either $X>Y$ in hierarchy α but $Y>X$ in hierarchy β , or conversely).

The effect of alignment and non-alignment is illustrated in (15). Note that for both the inverse and the direct, the Grammatical Relations hierarchy is constant; in particular, the Grammatical Functions hierarchy (subject>object) aligns with the Semantic Role hierarchy (agent>patient). We return to this below in Section 2.1.2.5.¹⁰

⁹ We will see below that the direct/inverse distinction is not involved with passive constructions which signal the non-alignment of the Semantic Role hierarchy with the Grammatical Function hierarchy.

¹⁰ Similar observations are made in a chart in Dahlstrom (1986) -- though the issue was not presented in terms of hierarchies and alignment of hierarchies.

(15) **The (non)-alignment of the Person Hierarchy and the GR Hierarchy:**

	Subject > Object Agent > Patient
a) Direct/Aligned	Person X > Person Y*
b) Inverse/Non-aligned	Person Y < Person X

* Where X outranks Y on the Person hierarchy.

This schema illustrates the function of the direct vs. inverse theme markers on the transitive verb. Row (a) shows that when the Person hierarchy is aligned with the GR (subject/agent > object/patient) hierarchy, the morphology will be direct. In (b), the Person hierarchy is non-aligned and the theme marker will show an inverse verb construction. Ideally, all of the hierarchies in a clause will be aligned. This predicts that direct is the unmarked status and inverse is the marked status. This prediction is borne out inasmuch as the direct markers (*-i*, *-ā*) are less complex than the inverse markers (*-iti*, *-ikw*).

2.2 Alignment Domain is within the Clause

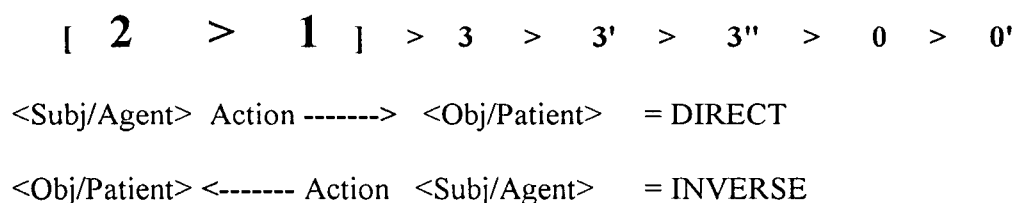
In order to illustrate the role of the Alignment Conditions and the direct/inverse system, the data in the following discussion includes transitive verbs with an animate object. These are grouped according to three categories:

- (i) Local (non-third) participants,
- (ii) Mixed sets (a local and a non-local),
- (iii) Non-local (third-person) participants only.

The inflectional morphology of each verb reflects the alignment or non-alignment of the Person with the GR hierarchies. Given that the GR hierarchies encode the argument structure properties of a verb, it follows that the direct/ inverse contrast is confined to the local clause; i.e., it only marks the alignment (direct) or non-alignment (inverse) of the co-arguments of the same verb.

I now illustrate the inverse/direct morphology for the three participant sets identified in (i) to (iii) above: local, mixed and non-local. This is illustrated for the two verbal paradigms, the Conjunct Mode and the Independent Mode. (see Appendix C for a description of these two paradigms.)

2.2.1 Local (Non-third) Participants



The same set of theme markers, *-i* 'direct' and *-it(i)* 'inverse', are used in the independent mode as are used in the conjunct mode when both participants are local (non-third person).

The following set of examples illustrate the direct and inverse morphology in the conjunct mode: Local participants involve only first and second persons, i.e., the speaker and the hearer. 2 outranks 1 on the person hierarchy. The direct morpheme in (a) indicates alignment of the Person hierarchy with the GR hierarchy, i.e., a second person is acting on a

first person. The inverse morpheme in (b) indicates non-alignment of the Person hierarchy with the GR hierarchy, i.e., a first person is acting on a second person.¹¹

- | | |
|---|--------------------------------|
| (16.a) ê -wâpam- i -yan
conj-see - dir -2sg
You see me. | 2 → 1
direct = aligned |
| b) ê -wâpam- it -ân
conj-see - inv -1sg
I see you. | 1 → 2
inverse = non-aligned |

In (a), the subject/agent is second-person and the object/patient is first-person. The verb morphology shows agreement for the higher person in the hierarchy, i.e., -(y)an '2nd person'. The morpheme -i 'direct' is used only when arguments are restricted to local (non-third) persons, and it signifies that the object/patient is lower on the Person hierarchy -- i.e., that the Person hierarchy and the GR hierarchy are aligned. Since there can only be first- and second-person arguments involved, the object must be first-person.¹²

In (b), the verb agreement -(y)ân 'first person' shows that one of the arguments is 1st person and the -it 'inverse' marker (local participants only) signifies that the subject/agent is

¹¹ Note that the person agreement markers -yan 'second person' in (16.a) and -ân 'first-person' in (16.b) represent the subject/agent. However, it would be misleading to analyze them as subject agreement, as a more complete paradigm would show that they code person agreement rather than grammatical function agreement (i.e. subject/object agreement). Cf. Appendix A for a complete set showing the direct and inverse paradigms for a declarative sentence in both the independent and conjunct modes. Observe that the agreement morphology typically represents the argument which is higher on the hierarchy: i.e., the subject in the direct paradigms and the object in the inverse paradigms. However, in the mixed sets involving third-persons and non-third persons, many portmanteau morphemes are involved.

¹² In this sense, the -i 'direct' morpheme represents the lower person on the hierarchy, i.e., first-person, and marks it as the object. With the (b) example, the -it 'inverse' morpheme represents the higher person on the hierarchy, i.e., second-person, and marks it as the object.

lower on the hierarchy than the object/patient, i.e., that there is non-alignment of the person and GR hierarchies. Hence the object/patient must be second- and the subject/agent must be first-person.

In the Independent paradigm, the argument which is higher on the hierarchy above is prefixed to the verb as shown in (17):

- (17.a) ki-wâpam-i -n 2 → 1
 2 -see -dir-sg direct = aligned
 You see me.
- b) ki-wâpam-iti-n 1 → 2
 2 -see -inv-sg inverse = non-aligned
 I see you.

Note that it is the higher person on the hierarchy which is represented by the pronominal prefix in both the direct and inverse constructions of the Independent Mode.

2.2.2 Mixed Set: Local and Non-local Participant

The direct/inverse system extends to third-person arguments. We look first at mixed sets with a third-person and a non-third-person argument.

[2	>	1	>	3	>	3'	>	3'']	0	>	0'
	<Subj/Agent>		Action	----->			<Obj/Patient>		=	DIRECT			
	<Obj/Patient>		<-----	Action			<Subj/Agent>		=	INVERSE			

The first examples involve the Conjunct Mode. The agreement morphology, including direct/inverse, occurs as portmanteau morphemes in this set:

- | | |
|--|---|
| (18.a) ê -wâpam-ak
conj-see - 1>3
I see him. | 1 → 3
direct = aligned
(portmanteau) |
| b) ê -wâpam-it
conj-see - 3>1
He sees me. | 3 → 1
inverse = non-aligned
(portmanteau) |

As portmanteau morphemes, *-ak* 'dir 1>3' and *-it* 'inv 3>1' cannot be broken down into their constituent parts. They partially disguise the direct/inverse morphemes used when a third-person argument is involved. The vowel quality in *-ak* is the same as *-â* 'direct' though the vowel length is shorter. Similarly, the vowel quality and length in *-it* is the same as the initial vowel in *-ik(w) ~ -iko* 'inverse'. In addition, [t] and [k] are both forms of third person inflection across the various paradigms (see Appendix A).

To get a better sense of the Mixed forms, which involve 2/1 acting on 3 (direct) or 3 acting on 2/1 (inverse), let us consider the Independent Mode. Example shows the *-â* 'direct' morphology clearly:

- | | |
|---|--------------------------------|
| (19.a) ni-wâpam-â -w
1 -see -dir-3
I see him. | 1 → 3
direct = aligned |
| b) ni-wâpam-ik
1 -see -inv
He sees me. | 3 → 1
inverse = non-aligned |

In the inverse example (b), the underlying */-ikw-w/* (-inv-3) is phonetically reduced to [-ik].

Once again, the higher ranking participant (i.e., 1st-person) is indicated in the prefix regardless of its thematic role or grammatical function (subject/agent vs. object/patient). The *-â* 'direct' and *-ik(w) ~ -iko* 'inverse' morphemes indicate that at least one argument is third-

person. Example (b) shows the first-person prefix and the inverse marker indicating that there is a third-person argument and this third-person holds a higher argument position than the first-person. In other words, the third-person is subject/agent and the Person hierarchy is not aligned with the GR hierarchy.

The verbal paradigms also include examples for 1/2 and 3' (3'-obviative) arguments, both direct and inverse. These involve additional morphology to mark the obviative status of the non-1/2 participant. In the interest of simplicity, I do not discuss these forms. See Appendix A for a complete set.

2.2.3 Non-local Participants Only

This section deals with verbs with non-local (third-person) participants only. These examples involve the proximate/obviative contrast between animate participants. Recall that the Algonquian tradition codes animate 3rd-persons as "3", and inanimates as "0". Obviation is marked with an apostrophe (3'), and further obviation with a double apostrophe (3'').

2	>	1		3	>	3'	>	3''		0	>	0'
<Subj/Agent>		Action ----->			<Obj/Patient>		= DIRECT					
<Obj/Patient>		<----- Action			<Subj/Agent>		= INVERSE					

In this set, the proximate/obviative contrast comes into play. If the verb is marked direct and the hierarchies are aligned, then the subject/agent is 3-proximate, i.e., unmarked third-person, while the object is marked 3'-obviative. Let us look at the independent mode forms involving third-persons:

(20.a) wâpam-ê -w
 see -dir-3
 She sees him(obv)

$3 \rightarrow 3'$
 direct = aligned

b) wâpam-ik(o-w)
 see -inv -3
 He (obv) sees her.

$3' \rightarrow 3$
 inverse = non-aligned

In Nêhiyawêwin, there is no prefix on the verb with only third-person arguments. In the inverse example (b), the underlying */-ikw-w/* (-inv-3) is (typically) phonetically reduced to [-ik]. The -ê 'direct' and -iko 'inverse' morphemes, as noted above, indicate that at least one non-local third-person is involved and show whether or not the person hierarchy is aligned with the GR hierarchy. The person agreement marking in both (a) and (b) is for 3-proximate, the higher of the two non-local arguments; therefore, the other argument must be 3'-obviative.

Now we will look at the verb morphology for the conjunct mode:

(21.a) ê -wâpam-â -t
 conj-see -dir-3
 She (prox) sees him (obv).

$3 \rightarrow 3'$
 direct = aligned

b) ê -wâpam-iko-t
 conj-see -inv-3
 He (obv) sees her (prox).

$3' \rightarrow 3$
 inverse = non-aligned

The -â 'direct' morpheme occurs in (a) where the 3 (prox) participant is the subject/agent and the 3' (obv) participant is the object/patient in accordance with the alignment conditions. The -iko 'inverse' morpheme in (b) indicates non-alignment: a higher-ranked person (3-proximate) is linked with a lower-ranked GR (object/patient), and a lower-ranked person (3'-obviative) is linked with a higher-ranked GR (subject/agent).

Verbal morphology with direct/inverse marking occurs with all transitive verbs involving animate participants. The presence of direct/inverse marking does not depend on whether the arguments are non-overt pronominals in the form of *pro*, or whether they are overt NPs. When the arguments are overt, they may be ordinary lexical NPs, wh-words, or indefinites like *awiyak* ‘somebody’, and will themselves be marked for the proximate/obviative distinction.

2.2.3.1 Overt Lexical NPs

In this section, we look at a wide range of data which illustrates the possibilities of the proximate/obviative system. The distinction between proximate and obviative third-persons is illustrated more clearly when there are overt lexical NPs which are marked to show the proximate/obviative distinction.

The verbs in (22) are direct, indicating that the Person hierarchy, in this case (3>3’), and the GR hierarchy are aligned. The 3-proximate subject/agent in (a) involves a deictic DP and the object is marked obviative. In (a) and (c), the object/patient is animate but non-human. In (d), the same animal is subject/agent. Accordingly, the moose has been assigned proximate status as subject/agent of (d).

- | | |
|--|-------------------------------------|
| <p>(22.a) ana nâpêw ê-mâcîtôtaw-â-t môsw-a
 that man conj-hunt-dir-3 moose-obv
 That man hunted the moose. J.434</p> | <p>3 → 3'
 direct = aligned</p> |
| <p>b) Bill ê-pîkiskwât-â-t Mary-wa
 Bill conj-speak -dir-3 Mary-obv
 Bill talked to Mary. J.197</p> | <p>3 → 3'
 direct = aligned</p> |

- c) omâcîw ê-wâpam-â-t môsw-a 3 → 3'
 hunter conj-see-dir-3 moose-obv direct = aligned
 The hunter saw the moose. J.437
- d) môs ê-wâpam-â-t omâcîw-a 3 → 3'
 moose conj-see-dir-3 hunter-obv direct = aligned
 The moose saw the hunter. cf. J.437

It should be noted, once again, that the verbal morphology identifies which NP plays which grammatical role (i.e., subject/agent or object/patient) in the sentence regardless of the word order. Dahlstrom (1986) provides examples from Plains Cree (Nêhiyawêwin) texts showing every possible word ordering combination of the arguments with respect to the verb and to each other.

With non-local participants, if one wishes to elicit an inverse Nêhiyawêwin sentence as in (23.a), then a passive English sentence with two overt NPs may be used. Though the first gloss was used to elicit (a), the sentence is active and is better glossed as in the active English version. This will be discussed in Section 2.2.2.5. In (b), the subject/agent is possessed by a third-person possessor. As noted above, the third-person possessor is proximate and the possessee must then be obviative. The inverse is used to specify that John's dog is chasing him (John) and not someone else.

- (23.a) ana môswa ê-mâcîtôta-iko-t anihi nâpêw-a 3' → 3
 that moose conj-hunt-inv-3 that man-obv inverse/non-aligned
 The moose was hunted by the man. J.435
 OR: The man hunted the moose.
- b) John o-têm-a ê-nawaswât-iko-t 3' → 3
 John 3.poss-dog-obv conj-chase-inv-3 inverse/non-aligned
 John's_i dog is chasing him_i. B.56

Because of the close connection between proximate status and topicality, the occurrence of an inverse verb form with third-person participants, i.e., a proximate object/patient, is often triggered by shifts in information structure. For example, in (24.a), the speaker assigns proximate status to the (contrastive) focussed NP which is object of the verb (contra the typical proximate subject = unmarked sentence topic). The sentence suggests that we are already talking about the woman (= discourse topic) that John saw and this sentence is correcting some mistaken claim as to her identity.

In (24.b), the pronominal form of the object in the elicited sentence implies an antecedent in the discourse, i.e., old information, topicality, and the person that the conversation is about. Hence the proximate status of this pronominal object/patient. The overt NP, *thunder*, (which is syntactically animate) is assigned obviative status because it is new information and the least topical even though it is subject.

- | | | |
|--------|--|-------------------------------|
| (24.a) | êko Mary kê-wâpam-iko-t John-a
the very one Mary rel-see-inv-3 John-obv
It was Mary that John saw. B.344 | 3' → 3
inverse/non-aligned |
| b) | ê-sêkih-iko-t pâyisiw-a
conj-frighten-inv-3 thunder(bird)-obv
The thunder frightens him. B.8 | 3' → 3
inverse/non-aligned |

Just as ordinary NPs participate in the alignment of the Person hierarchy with the GR hierarchy, so too do wh-words. Wh-phrases can show the same proximate/obviative contrasts as a regular lexical NP, and the inflectional morphology for their corresponding arguments on the verb behaves in the same manner in both cases. (25) illustrates aligned direct structures in a wh-context. In (25:a), the 3-proximate wh-phrase is subject/agent while

the 3'-obviative NP is object/patient. The obviative-marked wh-phrase in (b) is object/patient of the verb. In both cases, the proximate NP is subject/agent and the hierarchies are aligned.

(25.a)	awîna ê-pakamahw-â-t John-a who conj-hit-dir-3 John-obv Who saw John?	3 → 3' direct/aligned
--------	---	--------------------------

b)	awîni-wa John ê-pakamahw-â-t who-obv John conj-hit-dir-3 Who did John see?	3 → 3' direct/aligned
----	--	--------------------------

(26) illustrates non-aligned inverse structures with wh-words. The (a) example has the most topical (proximate) pronominal argument as the object/patient and the subject/agent is the obviative wh-phrase. In (b), the object/patient is 2nd-person with a 3-proximate wh-phrase as subject/agent. In both examples the Person hierarchy is non-aligned with the GR hierarchies and the verb is marked as inverse.

(26.a)	awîni-wa ê-pakamahw-iko-t who-obv conj-hit-inv-3 Who saw him/her?	3' → 3 inverse/non-aligned
--------	---	-------------------------------

b)	awîna ê-wâpam-isk who conj-see-3>2 Who saw you?	3 → 2 inverse/non-aligned
----	---	------------------------------

2.2.4 Non-Local Participants: Animate and Inanimate

In the previous section, we discussed transitive verbs in which both participants were animate third persons, and we saw that it is the alignment of the proximate/obviative contrast with the GR hierarchy which determines whether a verb will be direct or inverse. What happens when inanimate participants are included? All things being equal, one might expect that any

In accordance with the distinction between VTA - VTI verbs noted above, it is impossible to get an inverse structure for VTI verbs in Nêhiyawêwin. The action of an inanimate subject on an animate object ($0 \rightarrow 1$) produces an inverse structure of a VTA-type verb. Let us look at this more closely.

We have seen from the discussion above the following alignments for VTA verbs (Transitive with Animate object):

(27)	a)	Animate	>	Inanimate
	b)	Subject	>	Object
		Agent	>	Patient
	c)	3'	<	3

Consistent with the Alignment conditions, (27) is a context where the verb would be marked inverse since the Person hierarchy is not aligned with the GR hierarchies.

With this in mind, consider the possibilities that arise with a VTI (Transitive with Inanimate object), as illustrated in (28). If the Person hierarchy in (28.c) is aligned with the GR hierarchies in (b) and the Animacy hierarchy in (a), then the verb could, in principle, be marked direct. However, because VTI verbs do not bear direct/inverse marking, this alignment is not coded in the verb morphology.

(28)	a)	Animate	>	Inanimate
	b)	Subject	>	Object
		Agent	>	Patient
	c)	3	>	0

Class II verb: *-â*

Class III verb: *-Ø*

(29) illustrates the possibility of the Person/Animacy hierarchies not aligning with the GR hierarchy. In principle, this should yield an inverse verb form. But since VTIs do not inflect for the direct/inverse distinction, this non-alignment cannot be marked on a VTI verb.

(29)	a)	Inanimate	<	Animate
	b)	Subject	>	Object
		Agent	>	Patient
	c)	0	<	3

However, the resulting structure does surface as an inverse verb form, but it does so within the context of a VTA, as in (30) where the inanimate noun *maskihkiy* ‘medicine’ is acting on an animate entity.

(30)	awîna maskihkiy ê-nanâtawih-iko-t	0 → 3
	who medicine.NI conj-heal.VTA-inv-3	Inverse/non-aligned
	Who did the medicine heal? MA.401	

The fact that it is possible to switch from a VTI to a VTA in order to express the inverse relation of an inanimate acting on an animate (0 → 3) further confirms that the direct/inverse alternation does not affect GRs *per se*, but reflects the alignment of the Person hierarchy with GRs.

2.3 Alignment: Inverse vs. Passive

We have seen that the inverse form is a marked form in that the alignment of the person hierarchy relative to the GR hierarchies is violated. Inverse structures are often discussed in relation to passive constructions (cf., for example, Wolfart 1973, 1991; Thompson 1989;

One might argue that if inverse and passive were the same, they should not involve different verbal paradigms. In the discussion below, the Alignment Conditions are used to provide an account of the difference between inverse and passive.

The subject of a sentence is typically considered to be the unmarked sentential topic (cf. Erteschik-Shir 1993, for example).¹⁵ It was noted (in relation to (15) above) that direct is the unmarked (i.e., aligned) form insofar as the higher person on the Person hierarchy is the subject/agent (topic) of the sentence. Inverse is the marked (non-aligned) form of an active sentence in that the lower person on the Person hierarchy occupies the subject/agent (topic) position. Accordingly, we have seen that in direct constructions involving two third persons, the third-person subject is proximate.¹⁶ The inverse construction, in which the 3'-obviative argument is subject/agent, topicalizes (in the sentence context) the less "topic-like" argument according to the Person hierarchy.¹⁷

Nêhiyawêwin active clauses function in accordance with the two components (subject/object and agent/patient) of the GR hierarchy to provide both direct and inverse alignments. In inverse structures, the misalignment is between the Person hierarchy and the two GR hierarchies. Thus, in the inverse example in (31.a) above, we have the following structure:

¹⁵ Klaiman (1993) uses the term *ontological salience*.

¹⁶ In Nêhiyawêwin, only a proximate NP (as opposed to an obviative NP) may be a discourse topic.

¹⁷ Cf. Kinkade (1989) with respect to 'topical object' structures in Salish.

(32. a)	Jim ê-pakamahw- iko -t Joe-wa	INVERSE
	Joe (obv) hit Jim (prox)	
b)	Subject > Object	Syntactic Hierarchy
	Agent > Patient	Semantic Hierarchy
c)	3'-obv < 3-prox	Person Hierarchy

The direction of the GR hierarchies in (b) remain constant with respect to each other. It is the direction of the Person hierarchy in (c) which is non-aligned with the other hierarchies. In the process, the lower person, who is the "natural" object/ patient, is topicalized by making it the subject/agent of the verb.

English passive constructions also have a topical object, but the process is different. In an English passive, the patient (as sentential topic) is in subject position. The agent (the usual candidate for subject and topic) is relegated to an oblique phrase following the verb.

(33. a)	Jim was hit [by Joe].	English PASSIVE
b)	Subject > Oblique	Syntactic hierarchy
c)	Patient < Agent	Thematic hierarchy

In the English passive, the patient is in subject position, while the agent is in an oblique position and is introduced by a preposition. The syntactic roles change and are separated from their usual thematic counterparts, i.e., subject is no longer agent, as illustrated in (33). In effect, the two GR hierarchies are misaligned and it is **this** misalignment which is marked by the passive structure in English. To reiterate, English active vs. passive depends on a misalignment between the Syntactic (subject/ object) hierarchy and the Thematic (agent/patient) hierarchy.

Nêhiyawêwin passives (see (31.b)), like English passives, are restricted to the misalignment of the subject/object and the agent/patient hierarchies as illustrated below. However, in these situations, the verb is inflected only for its subject (i.e., the patient) -- oblique arguments are not marked in the verbal morphology.¹⁸

(34.a) Jim ê-pakamahw-ih̄t PASSIVE (Nêhiyawêwin)
 Jim conj-hit-PASS.3

b) **Subject** Ø
 Patient Agent

c) 3-prox Ø

In other words, in the Nêhiyawêwin passive, the patient is the subject -- just as in English. This constitutes a non-alignment of components within the GR hierarchy itself, i.e., between the Syntactic and the Thematic hierarchies. But since the oblique agent argument is not marked on the verb, there is no direction marking. In other words, the verb is detransitivized and there can be no alignment violation with respect to the Person hierarchy. The only person in (c) is the 3-proximate subject.^{19 20}

¹⁸ Nêhiyawêwin verbs may have applicative inflection whereby an animate indirect object replaces the direct object of the verb; however, there is no inflection for a demoted subject (a *chômeur* in the relational grammarian's terms).

¹⁹ An obviative 3rd-person can also be the subject in a passive sentence (see Appendix A).

²⁰ D. James (p.c.) points out that the issues involved with inverse vs. passive in Nêhiyawêwin may be more complex than I have shown them to be above. For example, there are some questions raised in the literature as to whether examples like (31.b) are indeed passives. (My analysis accepts the prevailing claim that (31.b) is passive.) James makes particular reference to Wolfart (1991) for a discussion of some of the issues.

2.4 Summary and Comments

In this chapter we have seen that the Alignment Conditions contribute much to the understanding of reference tracking in Nêhiyawêwin. We have seen how the proximate/obviative hierarchy and the animacy hierarchy form extensions of the Person hierarchy. The Person hierarchy, in turn, works in conjunction with to the GR hierarchies to mark the contrast between direct and inverse.

The inflectional morphology provides information with respect to the persons involved. The direct/inverse marking designates their grammatical roles -- in accordance with the Alignment Conditions -- to specify the grammatical relationships between two arguments in a single transitive clause.

(35) Alignment Conditions

- a) When the verb is marked DIRECT, the Person Hierarchy ($2 > 1 > 3 > 3' > 0 > 0'$) and the Grammatical Relations hierarchy (subject/agent > object/patient) are aligned.
- b) When the verb is marked INVERSE, the Person Hierarchy ($2 > 1 > 3 > 3' > 0 > 0'$) and the Grammatical Relations hierarchy (subject/agent > object/patient) are not aligned.

Inverse structures as discussed above do not occur in English, but do occur in Nêhiyawêwin.

Since inverse does not involve disruption of the GR hierarchies, the inverse Nêhiyawêwin verb retains its active (vs. passive) status and the verb is inflected for both arguments.

We have also seen that passive structures and inverse structures involve misalignment between two different sets of hierarchies:

- (36) a) Active vs. passive depends on a misalignment between the two GR hierarchies, i.e., between the Syntactic (subject > object) hierarchy and the Thematic (agent > patient) hierarchy.

- b) Direct vs. inverse depends on a misalignment of the Person hierarchy in relation to both of the GR hierarchies.

Active vs. passive misalignment occurs in both English and Nêhiyawêwin; however, the results are different in each of these languages. In English, which relies on structural positions for verbal arguments, a passive structure has the patient as subject and an oblique phrase containing the agent. In Nêhiyawêwin, verbal arguments are indicated in the agreement morphology. The demoted agent argument cannot be inflected on the verb -- only the patient argument (as subject) is part of the verbal AGR.

The theoretical point to be drawn from this discussion is that the direct and inverse marking is characteristic of VTA transitive verbs -- and where this marking does not exist, there is only a single argument position, i.e., the subject. Secondly, direct and inverse, by definition, range over a section of the Person hierarchy, as in $(2 > 1)$ or $(3 > 3')$, and inverse $(3 < 1)$ -- where each participant has a different value in the Person hierarchy. Given this "range", disjoint reference is obligatory with transitive verbs; in other words, coreferential combinations like $*(3 < > 3)$ and $*(1 < > 1)$, where both participants have the same value in the Person hierarchy, are impossible.

This makes predictions with respect to Binding Conditions A and B of the Binding Theory. Condition A states that an anaphor must be bound in its governing category. In other words, the [+anaph] constituent '...self' must be bound by the subject: $(3 < > \text{Anaph})$.

By definition, then, the verb cannot have direct or inverse morphology and ,therefore, it cannot be a transitive verb (VTA). It follows, then, that there can be no such thing as an A-bound lexical anaphor in argument (object) position of a verb in Nêhiyawêwin.

Condition B states that a pronoun must be free in its governing category. In other words, the object of a transitive verb cannot have the same reference as its subject. Since any two third-person arguments or a transitive (VTA) verb cannot both be proximate, that means that that the following configuration is not possible, i.e. , $*(3 < > 3)$ where both participants have the same value on the Person hierarchy. In other words disjoint reference is obligatory in a transitive clause and Condition B is a given.²¹

²¹ Bar el (1997) has looked at binding in Nêhiyawêwin and has found evidence that Condition C holds in the language. My own data in this regard, rather perversely, concentrates on situations where Condition C is violated.

Chapter 3

WHERE IS THE WH-WORD?

3.0 Introduction

In this chapter, we begin our investigation of wh-questions in Nêhiyawêwin -- an investigation which will span the remaining chapters. The following examples are representative:

- (1.a) awîna ana kâ-wâpam-â-t John-a
who that rel-see-dir-3 John-obv
Who is it that saw John?
- b) awîni-wa Mary ê-wî-wîkim-â-t
who-obv Mary conj-intend-marry-dir-3
Who is Mary going to marry?

My investigation of the nature of Nêhiyawêwin wh-questions is embedded within a theory of natural language which holds that, although languages may display surface differences of various kinds, they share a core set of principles in accordance with Universal Grammar. Under this view, one expects that the properties of wh-questions that have been found to hold in other languages should also be active in Nêhiyawêwin.

Wh-questions have the following characteristics (van Riemsdijk and Williams 1986:100): (i) there is a wh-word in Spec CP; (ii) a gap is involved; (iii) the wh-word is related to the gap by movement; (iv) the relation between the wh-word and the gap is subject to subjacency; and (v) the relation between the wh-word and the gap is unbounded. This chapter seeks to establish whether properties (i) to (iii) hold of Nêhiyawêwin wh-questions.

The last two properties are examined in Chapter 6. The questions that will preoccupy us are:

- (i) Where is the *wh*-word located at S-structure? and (ii) Is there *wh*-movement?

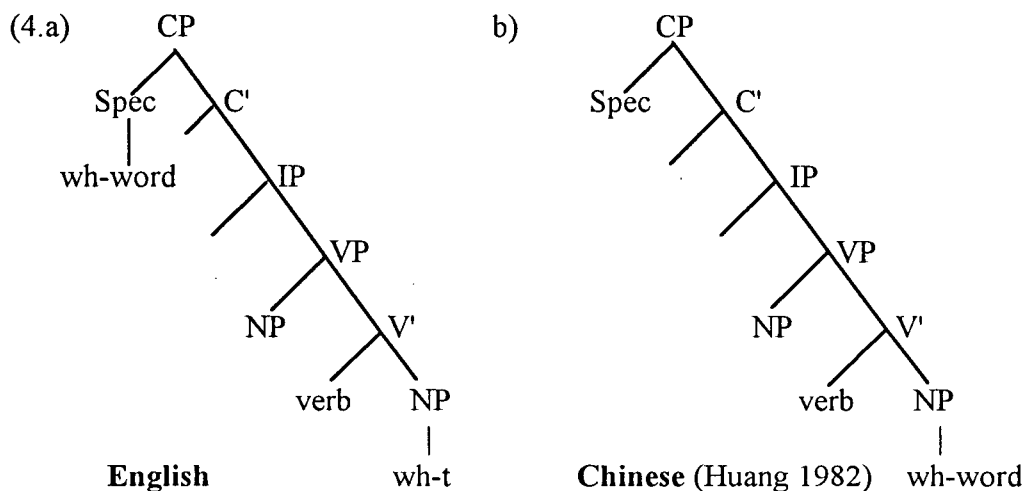
One way in which languages display surface variation is in how they satisfy properties (i) and (ii), namely the presence of a *wh*-word in Spec CP and the presence of a corresponding gap. In languages like English, the *wh*-word is evidently in Spec CP (as evidenced by the presence of *do* in Comp, i.e., the head (C) of CP) and there is an obvious gap:

- (2) Who_i did John see t_i?

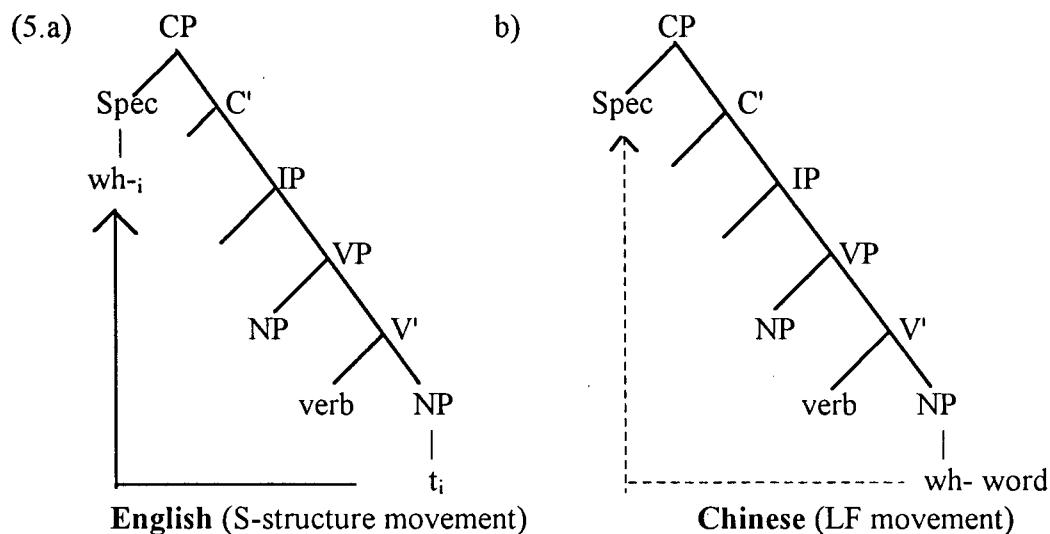
However, in languages such as Chinese, the *wh*-word is in argument position (Cheng 1991:123) and there is no apparent gap:

- (3) botong kan-wan-le sheme
Botong read-finish-ASP what
'What did Botong finish reading?'

At first glance, the Chinese data seems to contradict the claims in (i) and (ii) above, according to which all *wh*-questions have their *wh*-word in Spec CP with a corresponding gap in an A-position. To see this more clearly, compare the English and Chinese S-structures given in example (4):



Although Chinese wh-words are not in Spec CP at S-structure, various analyses (Huang 1982, Cheng 1991) have proposed that they move to that position at Logical Form (LF). This preserves the generalization that all wh-questions involve a relation between a wh-word in Spec CP and a gap. In English-type languages, this movement applies at S-structure and the wh-word appears in Spec CP at S-structure, as in (5.a). This is representative of languages that have overt wh-movement. In Chinese-type languages, the wh-word is *in situ* at S-structure, with covert wh-movement applying at LF as in (5.b).



Note that in both analyses, the *wh*-word is generated in an argument position. If the *wh*-word does not move at S-structure, then the *wh*-word remains in its base-generated, i.e. *in situ* position. If the *wh*-word moves at S-structure, then there is a relation between it and a gap in A-position. (The gap is represented as a trace (*t*), and the relation is indicated by co-indexation.) In light of the distinction between *wh-in situ* languages and *wh-movement* languages, a question that naturally arises concerning Nêhiyawêwin *wh*-questions is where *wh-movement* applies: at LF or at S-structure. Answering this question requires that we examine the relation of the *wh*-word to the clause it is associated with. In this chapter, I argue that:

- (i) In Nêhiyawêwin, the *wh*-word cannot be *in situ*, i.e., it is not in argument position of a verb;
- (ii) In Nêhiyawêwin, the *wh*-word cannot be in Spec CP of a clause, i.e., it does not move out of an argument position to the Spec CP.

If correct, these two claims lead back to the question we started with: What is the position of the *wh*-word? Given that *wh*-words are a kind of NP, one possibility is that *wh*-words would be positioned in the same way as ordinary NPs. As discussed in Chapter 1, in Nêhiyawêwin, ordinary NPs are analyzed as being adjoined to the clause and are co-indexed with a *pro* in argument position, as in (6.a). If *wh*-words are similarly licensed, this would lead to the configuration in (6.b).

(6.a) [NP_i [IP ...*pro*_i ...]]

b) *[*wh*_i [IP ...*pro*_i ...]]

I argue that (6.b) is impossible, which leads to a third claim about the nature of Nêhiyawêwin wh-questions:

- (iii) In Nêhiyawêwin, the wh-word is not adjoined to IP and co-indexed with pro (or other empty category) in argument position (cf. Reinholtz and Russell 1995 on Swampy Cree)

The remainder of this chapter is devoted to motivating the three claims made above. Section 3.1 surveys the surface properties of Nêhiyawêwin. In the course of doing this, it emerges that wh-words are not licensed in the same way as ordinary NPs; i.e., they are not adjoined to IP. Section 3.2 shows that the *in situ* hypothesis does not apply to Nêhiyawêwin: wh-words are not in A-position at S-structure. In Section 3.3, I show that the wh-movement hypothesis does not apply, i.e., wh-words do not move from an argument position to Spec CP. Section 3.4 introduces the null-operator hypothesis, which forms the basis of the rest of the thesis. Although Nêhiyawêwin wh-words do not undergo wh-movement *per se*, they are linked with a null operator, and it is this null operator which undergoes movement.

3.1 Nêhiyawêwin Wh-questions

This section introduces the surface characteristics of Nêhiyawêwin wh-questions. These include:

- (i) the sentence-initial position of the wh-word (Section 3.1.1);
- (ii) the agreement of the wh-word with the A-position it is construed with (Section 3.1.2). This involves the presence or absence of proximate/

obviative agreement, according to the status of a corresponding argument as represented in the verbal AGR.

- (iii) the choice of the complementizer on the verbal clause associated with the wh-word (Section 3.1.3). The complementizer on the verb may be *ê-* or *kâ-*.

3.1.1. The Position of the Wh-word

A general characteristic of Nêhiyawêwin wh-questions is the sentence-initial location of the wh-phrase as in (7.a) -- the [** NP.. V.. wh-*] and [** V.. wh- .. NP*] orderings as shown in (b) and (c) are ungrammatical:

(7.a) **awîni-wa** John **kâ-ocêm-â-t**
 who (obv) John (prox) rel-kiss-dir-3
 Who did John (prox) kiss?

b) **John kâ-ocêm-â-t awîni-wa*
 John (prox) rel-kiss-dir-3 who (obv)
 Who did John (prox) kiss?

c) **kâ-ocêm-â-t awîni-wa John*
 REL-kiss-dir-3 who (obv) John (prox)
 Who did John (prox) kiss?

In addition, in a Nêhiyawêwin sentence with two or more clauses, the sentence-initial wh-word may be construed with an argument two or three clauses away as in (8), where the wh-word is construed as the object of the embedded verb 'kiss'.¹

(8) **awîna** *ê-itwê-yan ê-itêyiht-am-an* John *ê-ocêm-â-t*
 who conj-say-2 conj-think-th-2 John conj-kiss-dir-3
 Who did you say you think John kissed? B.497

¹ Examples like (8) give the appearance of long-distance wh-movement. We will see in Chapter 5 that the wh-word always moves locally.

The fact that *wh*-words are restricted to clause-initial position is significant in a language in which (i) ordinary NPs order freely within the clause, as shown in (9); and (ii) NPs are restricted to their own clause as shown in (10).

- | | | | | |
|-------|-------------------|-----------------|------------|-----|
| (9.a) | John | ê-ocêm-â-t | Mary-wa | SVO |
| | John (prox) | conj-kiss-dir-3 | Mary-obv | |
| | John kissed Mary. | | | |
| b) | ê-ocêm-â-t | Mary-wa | John | VOS |
| c) | ê-ocêm-â-t | John | Mary-wa | VSO |
| d) | John | Mary-wa | ê-ocêm-â-t | SOV |
| e) | Mary-wa | John | ê-ocêm-â-t | OSV |
| f) | Mary-wa | ê-ocêm-â-t | John | OVS |

The following example illustrates the clause boundedness of NPs. *John* cannot precede the main clause verb, as shown in (10).

- (10) *John ni-kiskêyiht-ê-n ê-ocêm-â-t Mary-wa
 John I-know s.t.-th-sg conj-kiss-dir-3 Mary-obv
 I know that John kissed Mary.

This contrast between regular NPs (which order freely and are clause bound) and *wh*- NPs (which are sentence initial and not clause bound) is correlated with differences between the *wh*-words and ordinary NPs. NPs typically agree with the proximate/obviative value of the *pro* in the argument position with which they are construed. This agreement is necessary in order to identify the role of a given NP in any sentence with two or more third-persons. However, agreement is sometimes unmarked on *wh*-words.

3.1.2 Wh-Agreement

A wh-word may show agreement with the argument position that it is construed with. In particular, it may agree with the proximate/ obviative status of the A-position. As discussed in Chapter 2, the involvement of two third-persons requires that one argument be marked proximate (3) and the other argument be marked obviative (3'). This is illustrated in (11).

- (11) John ê-ocêm-â-t Mary-wa 3 → 3'
 John conj-kiss-dir-3 Mary-obv
 John (prox) kissed Mary (obv).

As interrogative NPs, *awîna* 'who' (prox) and *awînihi* or *awîniwa* 'who' (obv) show the same contrast for proximate/obviative features as would any other lexical NP. In (12.a), the wh-word is proximate and represents the subject of the verb with a (3') object. In (b), the wh-word is proximate and represents the object argument (with a 2nd-person subject).

- (12.a) *awîna* kâ-ocêm-â-t Mary-wa 3-wh → 3'
 who (prox) rel-kiss-dir-3 Mary-obv
 Who (prox) kissed Mary (obv)?
- b) *awîna* kâ-wâpam-at 2 → 3-wh
 who (prox) rel-see-2>3 (dir)
 Who did you see? J.417

The wh-word in both sentences in (13) is construed with the obviative object of the following verb. The expected agreement pattern occurs in (a) where the wh-word is marked obviative. However, the unmarked wh-word shown in (b) is also possible. The default (proximate) form *awîna* 'who' is usually acceptable where there is no chance of ambiguity.

- (13.a) *awîni-wa* John kâ-ocêm-â-t 3 → 3'-wh
 who-obv John rel-kiss-dir-3
 Who did John (prox) kiss?

- b) **awîna** John **kâ-ocêm-â-t**
 who John rel-kiss-dir-3 3 → 3'-wh
 Who did John (prox) kiss? cf.B.497

In both examples, the proximate NP *John* identifies the proximate subject argument of the verb.²

In (13.b) the non-agreeing wh-word occurs by itself in the wh-expression. It is also possible for a non-agreeing wh-word to occur with a deictic such as *ana* 'that', as in (14). As will be discussed in greater detail in Chapter 5, wh-deictic combinations are usually (but not obligatorily) non-agreeing, and they appear to require the *kâ-* complementizer. An agreeing form is given in (c).

- (14.a) **awîna ana** John **kâ-ocêm-â-t**
 who that one John rel-kiss-dir-3 3 → 3'-wh
 Who is it that John kissed?
- b) **awîna ana** John **kâ-wî-wîkim-â-t**
 who that one John rel-fut-marry-dir-3 3 → 3'-wh
 Who is it that John is going to marry? D.263
- c) **awîni-wa anihi** John **kâ-wî-wîkim-â-t** 3 → 3'-wh
 who-obv that(obv) John rel-fut-marry-dir-3
 Who is it that John will marry? D.261

There are two sub-dialect forms for the obviative wh-word, i.e., *awîni-wa* and *awînihi* 'who (obv)' as shown in (15).³

² By contrast, the absence of an overt NP in (i) with an unmarked wh-word could result in ambiguity as shown:

(i) **awîna kâ-ocêm-â-t**
 who rel-kiss-dir-3 3 → 3'
 Who kissed him/her?
 Who did s/he kiss?

(15)		Proximate	Obviative
	'man'	nâpêw	nâpêw-a
	Mary	Mary	Mary-wa
	'moose'	môs	môs-wa
	'who'	awîna	awîni-hi
			OR awîni-wa
	'what'	kîkwây	kîkwây ⁴

³ There are two sub-dialect forms for the obviative wh-word (examples in (i) and (ii)). The older form *awînihi* occurs in N. Alberta and is typically represented in the grammars (cf. Wolfart 1973).

- (i) **awîni-wa** John **kâ-wî-wîkim-â-t** 3 → 3' -wh
 who-obv John rel-intend-marry-dir-3
 Who is it that John will marry? D.261

- (ii) **awînihi** John **kâ-ocêm-â-t** 3 → 3' -wh
 who (obv) John (prox) rel-kiss-dir-3
 Who did John (prox) kiss? cf.B.497

The usual form found among speakers in more southerly regions of Saskatchewan and Alberta is *awîni-wa*. The obviative *-wa* suffix is the same suffix which typically appears on lexical NPs, as shown in the list in (15) which shows the forms of 'who' together with examples involving ordinary NPs. Note that, while the *-wa* pattern in (i) inflects wh-words like ordinary NPs (e.g., *awîni-wa*, *Mary-wa*), the *-hi* pattern in (ii) treats wh-words like determiner expressions (*awîni-hi*, *ani-hi* 'that (obv) one'). At present, it is not known whether the inflectional pattern of the wh-words has any consequences for the structure of wh-questions. In this regard, it is potentially significant that more southerly sub-dialects use *ê-* complementizer more freely and even employ independent mode verb forms with wh-questions; these are the same dialects which inflect wh-words like ordinary NPs (*awîni-wa*). The more conservative (northerly) dialect does use the *ê-* complementizer, but not as freely as in southern varieties, and the independent mode forms are much more restricted (i.e., to rhetorical questions); these are the dialects which inflect wh-words like determiner expressions (*awîni-hi*).

⁴ Inanimate NPs do not contrast for proximate/obviative. The form *kîkwây-a* is given in Wolfart (1973) as representing the plural form, which typically collapses with obviative for inanimate NPs.

The wh-words given in (15) are those which are construed with argument positions. There are also wh-adverbials (cf. Section 3.2.2), but they do not show wh-agreement, and so are not relevant to the issue at hand.

In the examples above, we have seen that the wh-word either shows agreement [+AGR] with its corresponding argument on the verb or is unmarked or [-AGR] with respect to the proximate/obviative status of its referent in the wh-question. In other words:

- (i) A [+AGR] wh-word occurs in the obviative form *awîniwa* or *awînihi* if its referent in the following clause is obviative, or as (unmarked) *awîna* if its referent is proximate.⁵
- (ii) A [-AGR] wh-word occurs in the unmarked form *awîna*.

Morphologically, a wh-word has two forms: the unmarked proximate form *awîna*, and the marked obviative form *awîniwa* or *awînihi*, depending on the sub-dialect. Moreover, an obviative argument may be linked to either an obviative wh-word or an unmarked wh-word. This establishes that the unmarked form of the wh-word is not specified as [+proximate], but rather is a default form, i.e., unspecified for the proximate/obviative distinction. In addition, the use of a default non-agreeing wh-word occurs in every sub-dialect; and although individual speakers may differ in how they use the non-agreeing form, everybody uses it.

⁵ I will focus my arguments on wh-words construed with obviative argument positions. The proximate cases which use the *awîna* neutralize the cases of [+AGR] and [-AGR] because proximate is morphologically unmarked. The analyses for the [+AGR] and [-AGR] forms for obviative cases can be generalized to the proximate examples (see Chapter 5).

In summary, we have seen: i) that wh-words always occur sentence initially; and ii) that wh-words may agree or not with the argument position they are construed with, i.e., they may be [+AGR] or [-AGR].

3.1.3 Choice of Complementizer

We now consider the evidence with respect to complementizer choice in wh-questions.

There are three possibilities: *kâ-* complementizer, *ê-* complementizer, or no complementizer at all, as illustrated in (16). In all of these examples, the wh-word agrees with a proximate argument.

- 16.a) *awîna* *kâ-ocêm-â-t* John-a 3-wh → 3'
 who (prox) rel-kiss-dir-3 John-obv
 Who is it that kissed John (obv)? // Who kissed John?
- b) *awîna* *ê-ocêm-â-t* John-a 3-wh → 3'
 who (prox) conj-kiss-dir-3 John-obv
 Who kissed John (obv)?
- c) *awîna* *êkotê* *ki-wâpam-â-w* 2 → 3-wh
 who there 2-see s.o.-dir-3
 Who did you see there? D.66

(16.a) and (16.b) there is contrast with respect to element is the choice of *kâ-* or *ê-* complementizer⁶ (or conjunct marker as they are referred to in Algonquian grammars, cf. Wolfart & Carroll (1981), Ahenakew (1987a), for example). Another possibility is for the

⁶ Speakers (all dialects) often explain the difference between *ê-* and *kâ-* as being a matter of present vs. past tense respectively. However, in my experience this tense distinction is consistently disregarded in the elicited sentences. The *ê-* form can be elicited using either past or present tense.

wh-word to occur with a verbal clause that has no complementizer, the so-called Independent Mode shown in (16.c). As we shall see, this third possibility is much more restricted.

We first examine conjunct mode complementizers in more detail, looking at the function of the *kâ-* complementizer in a variety of structures (Section 3.1.3.1); then we will turn our attention to the *ê-* complementizer (Section 3.1.3.2). We close with a brief discussion of the independent mode (Section 3.1.3.3).

It should be noted that, in this section, only examples with agreeing wh-words are given. This is done in order to present the range of complementizer variation more clearly. (See Chapter 5 for discussion and analysis of how wh-agreement interacts with complementizer variation.)

3.1.3.1 Complementizer *kâ-*

Complementizer *kâ-* is not obligatory in elicited wh-questions; however, *kâ-* occurs more frequently with more northerly conservative speakers (like Bill) who gives the *kâ-* form in Nêhiyawêwin with the simple elicited question "Who kissed John". One speaker (Donna) uses the *kâ-* form only with the focussed English 'who is it that...' elicitation form.

The complementizer *kâ-* is termed by Ellis (1983) a restrictive subordinator. Complementizer *kâ-* is obligatory in clefted or focussed NP constructions in Nêhiyawêwin (as in (17.a) and (b)) and also in relative clauses as shown in (17.c); otherwise, the usual complementizer is *ê-*.

- (17.a) [êkoni Mary-wa] John kâ-wâpam-â-t
 the very one Mary-obv John rel-see-dir-3
 It's Mary that John saw.

- b) [John ana] kâ-wâpam-â-t Mary-wa o-kâwî-yi-wa
 John that one rel-see-dir-3 Mary-obv 3-mother-obvP-obv
 It's John that saw Mary's mother. J.750
- c) [naha nâpêw kâ-sâkih-â-t Mary-wa] ocêm-ê-w
 that (dist) man rel-love-dir-3 Mary-obv kiss-dir-3
 [That man who likes Mary] he kissed her. cf.B.74

What do focussed NP constructions and relative clauses have in common? In English, both these constructions may involve empty operator movement to Spec CP; and both involve an NP located outside the clause as antecedent of the operator-variable chain.

In Nêhiyawêwin, focus constructions and relative clauses have an obligatory *kâ-* complementizer. Note that this complementizer does not occur in ordinary complement-type subordinate clauses in the language. Therefore, there must be some link between its obligatory occurrence in relative or cleft-type constructions and the operator movement typical of these structures.⁷

Structures with deictics such as *ana* 'that' are also found with wh-phrases, and the presence of the deictic seems to have a focussing effect. With this form of the wh-phrase, only the *kâ-* complementizer is licit, as illustrated in (18).

- (18.a) awîna ana kâ-ocêm-â-t John-a 3-wh → 3'
 who that rel-kiss-dir-3 John-obv
 Who is it that kissed John? D.17
- b) *awîna ana ê-ocêm-â-t John-a 3-wh → 3'
 who that conj-kiss-dir-3 John-obv
 Who is it that kissed John? cf.D.17

⁷ When a clefted English sentence is elicited as in (17.a), the Nêhiyawêwin translation always has *kâ-* and some form of [NP NP] structure sentence initially. (a) has *êkoni Mary-wa* 'Mary (is) the very one'. Alternately the cleft might be *Mary-wa êkoni* 'the very one (is) Mary' or some speakers use a form with a deictic as shown in (b). We will see in Chapter 6 that deictics like *ana/anihi* 'that (one)' have focussing properties.

The contrast in (18) is very important. The occurrence of the deictic is associated with the focussed or relativized structures in (17), which are environments requiring operator movement. Given that wh-questions must also have some form of operator movement, we must assume that operator movement is allowed with both *ê-* and *kâ-* complementizers.

Complementizer *kâ-* also occurs (though not obligatorily) with other forms of the wh-expression; for example:

- (19.a) **awînihi** Mary **kâ-pîkiskwat-â-t** 3 → 3'-wh
 who (obv) Mary rel-speak to-dir-3
 Who is Mary talking to? cf. B.294
 Who is he [(the one) that Mary is talking to]?

- b) **awînihi** *ê-itwê-yan* **kâ-pakamahw-â-t** 3 → 3'-wh
 who(obv) conj-say so-2 rel-hit s.o.-dir-3
 Who did you say that s/he hit? B.36

It is plausible that, in general, *kâ-* clauses involve operator movement in the verbal clause (as reflected in the alternate glosses given above): this is consistent with the fact that they occur in relative clause environments and focus environments as well as wh-questions. In addition, the parallel between clefted focus constructions (see (17)) and wh-clefts (see the wh- examples in (14) and (18)) suggests that wh-questions can be parsed into two clauses -- a copular-type nominal clause typical of cleft constructions plus the verbal clause. Within the copular structure, the first part constitutes the wh-word while the second part contains the DP subject -- with the verbal clause adjoined somewhere inside the nominal clause. Much of Chapter 4 is devoted to motivating this claim.

3.1.3.2 Complementizer ê-

While complementizer *kâ-* is obligatory in relative clauses and focussed NP constructions, it is not obligatory in wh-questions. In fact, a wh-question may occur with either a *kâ-* or an *ê-* complementizer.

- (20.a) **awînihi** Mary **kâ-ocêm-â-t** 3 → 3'-wh
 who (obv) Mary rel-kiss s.o.-dir-3
 Who did Mary kiss? D.136.b

- b) **awînihi** Mary **ê-ocêm-â-t** 3 → 3'-wh
 who (obv) Mary conj-kiss s.o.-dir-3
 Who did Mary kiss? D.136.a

The problem which presents itself here is: if wh-questions with *kâ-* share something in common with clefted or focussed NPs, then what are the structural properties of wh-questions when the *ê-* complementizer is used?

In addition to appearing with wh-questions, the *ê-* complementizer occurs with ordinary complement-type clauses (21.a), and sometimes even in main clauses (21.b).

- (21.a) **kahkiyaw nâpêw itêyiht-am-(w) ê-takahkâpêwi-t**
 all man think-th-(3) conj-handsome-3
 Every man thinks he is handsome. D.191.b

- b) **môhkomân ê-ohci-nipa-iso-t**
 knife conj-with-kill-reflex-3
 He killed himself with a knife D.114

While the *kâ-* complementizer clearly correlates with operator environments, the status of the *ê-* complementizer is less clear, especially as regards the possibility of null-operator movement. This question is taken up in detail in Chapter 5.

As with the *kâ-* complementizer, the contrasting examples in (22) show that the *wh*-word is also restricted to clause-initial position with *ê-* complementizer.

- (22.a) **awînihi** Mary **ê-wa-wâpam-â-t** 3 → 3'-wh
 who (obv) Mary conj-redup-see s.o.-dir-3
 Who is Mary seeing (i.e., dating)? D.132
- b) *Mary **ê-wa-wâpam-â-t** **awînihi** 3 → 3'-wh
 Mary conj-redup-see s.o.-dir-3 who (obv)
 Who is Mary seeing (i.e., dating)? D.132
- c) ***ê-wa-wâpam-â-t** **awînihi** Mary 3 → 3'-wh
 conj-redup-see s.o.-dir-3 who (obv) Mary
 Who is Mary seeing (i.e., dating)? D.132

If the *wh*-word is construed with an A-position in an embedded clause, there are two possibilities: either the *wh*-word occurs in clause-initial position of the embedded clause (23.a), or it occurs in sentence-initial position (23.b).

- (23.a) **namôya** **ni-kiskêyiht-ê-n** [**awîna ê-wîhtamaw-â-t**]
 neg 1- know s.o.-dir-1sg [who conj-tell s.o.-dir-3]
 I don't know who told him. B.393
- b) **awîna** **ê-itwê-yan** **ê-pakamahw-isk**
 who conj-say so-2 conj-hit s.o.-3>2
 Who did you say hit you? B.141

(23.b) appears to involve long-distance movement of the *wh*-word itself. However, in my analysis in Chapter 5, I argue that there is long-distance movement of a null operator (within the *ê-* clause) -- and that the *ê-* complementizer occurs in environments where two clauses are conjoined.

3.1.3.3 Independent mode

The evidence provided for wh-questions above involves the conjunct mode which is much more commonly used -- not only for wh-questions, but in general (see Chapter 2). However, wh-questions in Nêhiyawêwin may also occur with the independent mode which does not involve an overt complementizer. This is a marginal form for wh-questions and there is considerable variation among speakers. More conservative speakers (i.e., Bill) use this form only for rhetorical questions (24.b). Younger speakers (like Donna), on the other hand, use the form more freely as in (24.a), for example:

- (24.a) **awîna** êkotê ki-wâpam-â-w
who there 2-see s.o.-dir-3
Who did you see there? D.66
- b) **awîna** kiskêyiht-am-(w) **tânêhki** kê-sipwê-t
who know s.t.-th-(3) why conj-leave-3
Who knows why he left? B.169

As suggested above, the interpretation available to the independent forms is different from the conjunct forms. Older speakers typically use the independent form for questions which are either rhetorical or irrealis in nature, i.e., 'Who loves his mother?' -- or in questions like (b) which can be interpreted in the idiom (of English, at least) as non-questions. The embedded question with 'why', as usual, involves *kâ-*; however, it is the independent initial verb which is of interest here. Depending on the situation and the intonation/stress used, (24.b) can have the following interpretations in English:

- (i) Which one of you knows why he left?

(ii) Nobody really knows why he left.⁸

(iii) Does anybody know why he left?

In the case of the younger speaker (Donna) who uses the form more liberally, the contrast between the independent and the conjunct forms seems to involve differences in presupposition. According to her description, the questioner has no knowledge of or preconceived notion about the issue which is being questioned using the independent mode. It is an "out of the blue" question, i.e., there is no discourse-linked⁹ interpretation (Pesetsky 1987). Another speaker (Mary Ann) feels the use of the independent mode is most appropriate if the event (i.e., a fight, for example) is happening now, while the conjunct forms (both *ê-* and *kâ-*) are used to refer to some event in the past.

The primary focus of this thesis concerns the properties of conjunct mode wh-questions with *kâ-* and *ê-* complementizers. The syntax and semantics of independent mode wh-questions is an area which requires much more research.

3.1.4 Summary

In summary, we have seen that wh-questions show the following properties:

(i) the wh-phrase is clause initial.

⁸ Note in the translations that the quantifiers *nobody* and *anybody* may be used to translate *awîna*, suggesting that this use of *awîna* in Nêhiyawêwin is related to polarity. Compare this with evidence for Moose and Swampy Cree in Section 3.2.4 below.

⁹ A discourse-linked interpretation requires a discourse context to determine the precise referent or meaning.

- (ii) the wh-word agrees or not with its corresponding argument in the verbal complex.
- (iii) a wh-question uses either complementizer, *ê-* or *kâ-* in the conjunct mode.
(The independent mode, though also used, is less common.)

In the following sections, we consider three possible hypotheses concerning the relation of the wh-word to the verbal clause. In Section 3.2, I look at the wh- *in situ* hypothesis. In Section 3.3, I look at the wh-movement hypothesis; and in Section 3.4, I consider the Null-operator movement hypothesis.

3.2 The Wh-*in situ* Hypothesis

In this section, we will consider some of the characteristics of wh-*in situ* languages which are evidenced in Nêhiyawêwin and other Cree dialects, specifically Swampy Cree (the N-dialect spoken in northern Manitoba and Ontario) and Moose Cree (the L-dialect spoken around Moose Factory, Ontario).

In a wh-*in situ* language, a wh-word remains in argument position of the verb at S-structure rather than moving to Spec CP. This analysis has two parts: first, the wh-word is in A-position; and second, the wh-word does not move.

According to Cheng (1991), wh-*in situ* languages have the following properties:

- (i) the wh-word is in A-position (at S-structure);
- (ii) yes/no questions are associated with a question (Q) particle;
- (iii) wh-questions are associated with a wh- Q particle; and

- (iv) wh-words are polarity items, i.e., they are ambiguous between an interrogative interpretation 'what' and an indefinite interpretation 'something/anything'.

A language which exhibits all of these properties is Chinese, which is generally considered to be a wh- *in situ* language. Wh-words occur only in argument positions, (25). Yes/no questions are associated with a sentence-final Q-particle *ma*, (26.a). Wh-questions are associated with an optional sentence-final Q-particle *ne*, (26.b). Wh-words may also be interpreted as indefinites if they are under the scope of an operator, such as negative *mei*, as in (27), or the yes/no Q-particle *ma* in (26.a).

- (25) botong kan-wan-le sheme
Botong read-finish-ASP what
'What did Botong finish reading?'

- (26.a) jialuo mai-le sheme ma
Jialuo buy-asp what Q_{Y/N}
Did Jialuo buy anything?

- b) shei mai-le sheme (ne)
who buy-ASP what (Q_{wh})
'Who bought what?'

- (27) jialuo mei-you mai sheme
Jialuo not-have buy what
Jialuo did not buy anything?

The remainder of this section examines to what extent these four properties are attested in Nêhiyawêwin. I will also discuss material from Swampy Cree and Woods Cree dialects -- both of which show stronger evidence with respect to the ambiguity of wh-words.

3.2.1 The Wh-word is not in Argument Position

We have noted in Chapter 1 that Nêhiyawêwin is a free-word-order language, and we have observed the obligatory clause-initial position for wh-words in the language. However, given that overt NPs are themselves arguably not in A-position (at least at S-structure, see Chapter 1, Section 1.2.1), the fact that wh-words have a fixed position does not necessarily indicate they are not occupying an A-position. In order to determine whether Nêhiyawêwin is, or is not, a wh- *in situ* language, it is therefore necessary to examine the other wh- *in situ* properties.

3.2.2 Yes/No Question Particles

Nêhiyawêwin has some of the properties of wh-*in situ* languages. For example, there is a Q-particle *ci* for yes/no questions.

(28) Nêhiyawêwin (Plains Cree):

- a) awiyak *ci* ê-pâhpi-t
 somebody Q conj-laugh-3
 Did anybody laugh? B.128
- b) Mary *ci* êka ê-sâkih-â-t ni-tosk-astotin
 Mary Q neg conj-love-th-3 1-new-hat
 Doesn't Mary like my new hat? B.331

The Q-particle typically occurs in second position in the sentence. The corresponding Q-particles for Swampy Cree is *nâ* and in Moose Cree it is *na*.

(29) Swampy Cree:

ki-(t)asoniyam-in nâ
2-have money-sg Q
Do you have any money?

(30) Moose Cree: (Ellis 1983:29)

swâp-ihk na ihtâ-w
store-loc Q be there-3
Is she at the store?

3.2.3 Wh-Question Particles

According to Cheng's analysis, if there is a Q-particle for yes/no questions, then there must also be a wh-question particle. Cheng allows for the possibility that the wh- Q-particle may be overt or null (non-overt). At first glance, Nêhiyawêwin seems to counterexemplify this claim, since wh-words such as *awîna* 'who' and *kîkwây* 'what' do not co-occur with a Q-particle.

(31) Nêhiyawêwin (Plains Cree):

- | | | |
|----|-------------------------------|-----------|
| a) | awîni-wa John ê-wîkim-â-t | 3 → 3'-wh |
| | who-obv John conj-marry-dir-3 | |
| | Who did John marry? | J.798 |
| b) | kîkwây John atâw-ê-w | 3 → 0-wh |
| | what John buy-th-3 | |
| | What did John buy? | B.519 |

However, although wh-words construed with A-positions are not associated with a Q-particle, wh-adverbials do contain a morpheme which is a candidate for a Q-particle. The

table in (32) illustrates the prefix morpheme *tân-* which, when added to an independently-occurring adverbial, creates an adverbial wh-word. This could be argued to be a Q-particle:

(32) **Wh-Adverbials**

wh-	Adverbial				Wh-adverbial	
tân-	+	itê	'there, thither'	=	tânitê	'where, whither'
tân-	+	ita	'there'	=	tânita	'where'
tân-	+	isi	'thus'	=	tânisi	'how'
tân-	+	ispî	'then'	=	tânispî	'when'
tân-	+	tahto	'as many'	=	tântahto	'how many'
tân-		?		=	tânêhki	'why'

The same morpheme *tân-* is used with pronominal agreement suffixes to form a paradigm for 'which (one)'. The table in (33) shows this set (in the first column) in conjunction with the 'who/what' paradigm and with a demonstrative paradigm:

(33)

	'which'(one)	'who/what'	'this'
3	tân- i	awîn- a	aw-a
3pl	tân- i-ki	awîn- i-ki	ô-ki
3'	tân- i-hi	awîn- i-hi / -wa	ô-hi
0	tân- i-(ma)	kîkwây	ô-ma
0pl	tân- i-hi	kîkwây-a	ô-hi

Consistent with Cheng (1991), in yes/no questions, a Q-particle is evident in the form of second-position *cî*. However, on the basis of the surface evidence, it remains unclear whether or not wh-words, as a class, are associated with a Q-particle. Given that wh-adverbials contain the Q-particle *tân-*, the status of *awîn-* 'who' and the *kîkwây* 'what' series, which appear to lack an overt Q-particle, becomes moot. On the basis of the surface evidence, one could conclude that wh-questions lack a Q-particle, and that Nêhiyawêwin

therefore does not have the properties of *wh-in situ* language. The surface morphological evidence is consistent with either analysis.¹⁰

3.2.4 Ambiguity of *wh*-words

Another of the characteristic features of *in-situ* *wh*-languages is that *wh*-words exhibit polarity for interrogativity (Cheng 1991:123 ff). In other words, they may have an interrogative interpretation or they may be indefinite. At least the potential for this ambiguity exists in some dialects of Cree, e.g., Moose Cree *kêkwân* 'what, something' (Ellis 1983:70-71, 127).

Examples (34.a) and (b) illustrate the interrogative use of inanimate *kêkwân* 'what' in the proximate and obviative forms respectively. The *wh*-word occurs sentence initially and always with the conjunct form of the verb. The indefinite use of *kêkwân* 'something' 'something' is shown in (c) with independent mode.

(34) Moose Cree:

- | | | |
|----|---|---------------|
| a) | <i>kêkwân</i> n'tawêl't-am-an
What want s.t.-th-2sg
What do you want? | (conjunct Vb) |
| b) | <i>kêkwâliw</i> n'tawêl't-ah-k
what (obv) want s.t.-th-3
What does he want? | (conjunct Vb) |

¹⁰ Under either analysis, there remains the question of why *wh*-words associated with adverbial positions are consistently associated with the *wh*-typing morpheme (*tân-*), while *wh*-words associated with an argument position (e.g., *awîn-* 'who' and *kîkwây* 'what') do not have an (overt) *wh*-typing morpheme.

- c) ki-n'tawêl't-ê-n na **kêkwân**
 2-want s.t.-th-2sg Q. something (independent Vb)
 Do you want something?

Here the indefinite pronoun occurs after the verb. In other words, the position of the word *kêkwân* disambiguates between its two possible meanings. Example (c) is a yes/no question, and the Q-particle *na* occurs in second position in the sentence.

The following examples illustrate the same pattern for the wh-word *awênihkân*

'who/somebody' for Moose Cree:

(35) **Moose Cree:**

- a) **awênihkân** wêyâpam-at anta
 who see+I.C.-2>3 there (conjunct Vb)
 Whom do you see there?
- b) ni-wapam-a-w **awênihkân** walawîtimi-hk
 1-see-dir-3 something outside-loc (independent Vb)
 I see somebody outside.

Once again, the wh-word *awênihkân* 'who' occurs sentence initially and with the conjunct verb. The indefinite *awênihkân* 'somebody' shown in (b) occurs after the verb which is in the independent mode. The position of the wh-word disambiguates between the interrogative and the indefinite meaning. In addition, the wh-question uses the conjunct form of the verb while the independent verb occurs in the examples provided for indefinite readings.

In Swampy Cree, only (proximate/obviative) *kêkwân/kêkwâniw* 'what/something' is ambiguous while *awêna* 'who' has only interrogative meaning (contrast *awiyak* 'somebody'). (cf. Glossary of Wolfart 1988; Cook-Neff (undated).)

According to Reinholtz and Russell (1995), it is solely the Independent vs. Conjunct verb strategy which is used to disambiguate between the two interpretations of *kêkwân* 'what, something' in the Swampy Cree examples in (36). (Presumably, however, the word ordering in the (a) example is free.)

(36) Swampy Cree:

- | | | |
|----|---|-------------------|
| a) | kêkwân ki-kî-wâpahtên
what 2-past-see it
You saw something.
* What did you see? | (independent vb.) |
| b) | kêkwân kê-kî-wâpaht-an
what rel-past-see it-2
What did you see? | (conjunct vb.) |

Regardless of the sentence-initial position of *kêkwân*, the above sentence with the independent verb form can only have the indefinite reading. Wh-questions with *kêkwân* 'what' always occur with the conjunct verb form, while the indefinite reading *kêkwân* 'something' can be obtained only with the independent form of the verb. The other set in Swampy Cree is *awêna* 'who' and *awiyak* 'somebody'.

In Nêhiyawêwin (Plains Cree), neither wh-word ('who' or 'what') has a form which is homophonous with the indefinite pronominal. The *awîna* 'who' *awiyak* 'somebody' forms are similar to the Swampy Cree set. Both examples involve the conjunct mode of the verb.

(37) Nêhiyawêwin (Plains Cree):

- | | | | |
|----|--|----|--|
| a) | awîna ê-pâh-pâhpi-t
who conj-redup-laugh-3
Who is laughing? MA.259
≠Someone is laughing. | b) | * ê-pâh-pâhpi-t awîna
conj-redup-laugh-3 who
≠Who is laughing?
≠Someone is laughing. |
|----|--|----|--|

The interrogative *awîna* 'who' is restricted to clause-initial position. With clause-final position as in (b), the sentence is ungrammatical with either interrogative or indefinite interpretation. With indefinite *awiyak* 'somebody', either ordering is grammatical, i.e., it acts like an ordinary NP.

(38) *Nêhiyawêwin* (Plains Cree):

- | | | | |
|----|--|----|--|
| a) | awiyak ê-pâh-pâhpi-t
somebody conj-redup-laugh-3
≠Who is laughing?
Somebody is laughing. cf.MA.259 | b) | ê-pâh-pâhpi-t awiyak
conj-redup-laugh-3 somebody
≠Who is laughing.
Somebody is laughing. |
|----|--|----|--|

The interrogative *awîna* 'who' and indefinite *awiyak* 'somebody', although related, are clearly distinct forms.

A similar pattern is attested for the inanimate wh-word *kîkwây* 'what', which contrasts with the indefinite *kîkwêy* 'something'. Although, *kîkwây* 'what' is segmentally similar to *kîkwêy* 'something', the vowel quality is consistently distinct (*â* vs. *ê*).¹¹ The wh-word is restricted to clause-initial position, and is only compatible with a wh-interpretation.

(39) *Nêhiyawêwin* (Plains Cree):

- | | | | |
|----|--|----|--|
| a) | kîkwây atâw-ê-w
what buy-th-3
What did he buy? cf.B.519
≠He bought something | b) | *atâw-ê-w kîkwây
buy-th-3 what
≠What did he buy?
≠He bought something. |
|----|--|----|--|

¹¹ The forms as reported for *Nêhiyawêwin* in various sources are:

	Wolfart (1973)	Ahenakew (1987)	Blain
'what'	kîkway	kîkwây	kîkwây
'something'	kîkwây	kîkway	kîkwêy

In the form which I write as *kîkwêy* 'something', I have used the vowel quality I hear invariably from both Alberta and Saskatchewan speakers. I expect that Ahenakew's version, *kîkway*, sounds the same as my version. Wolfart's form, *kîkwây*, seems to suggest a stress shift.

As for the indefinite *kîkwêy* 'something', like other NPs it may appear either before or after the verbal complex, and is compatible only with an existential interpretation.

(40) **Nêhiyawêwin (Plains Cree):**

- | | | | |
|----|--|----|--|
| a) | kîkwêy ka-wîhtamaw-iti-n
something fut-tell it-inv-1>2
I will tell you something. MA.197.a
≠What did I tell you? | b) | ka-wîhtamaw-iti-n kîkwêy
fut-tell it-inv-1>2 something
I will tell you something
≠What did I tell you? |
|----|--|----|--|

It is evident that Nêhiyawêwin has distinct interrogative and indefinite forms.

However, the wh-word and the corresponding indefinite are so similar that there is no doubt they were once the same. While Nêhiyawêwin wh-words are never homophonous with indefinites, other Cree dialects display either partial or complete homophony, as can be seen from the chart in (41). Like Nêhiyawêwin, Swampy Cree has distinct forms for 'who' and 'somebody', *awêna* and *awiyak* respectively. However, the swampy Cree forms for 'what' and 'something' are homophonous, both being realized as *kêkwan*. Moose Cree shows complete homophony: the forms for 'who' and somebody' are homophonous (*awênihkân*), as are the forms for 'what' and 'something' (*kêkwân*).

(41) **Wh-words and Indefinites**

Dialect	Wh-word		Indefinite	
Nêhiyawêwin: (Plains Cree)	awîna	'who'	awiyak	'somebody'
	kîkwây	'what'	kîkwêy	'something'
Swampy Cree:	awêna	'who'	awiyak	'somebody'
	kêkwan	'what'	kêkwan	'something'
Moose Cree:	awênihkân	'who'	awênihkân	'somebody'
	kêkwân	'what'	kêkwân	'something'

If the dialectal differences summarized in (41) are taken into consideration, then one is led to the conclusion that, historically, wh-words and indefinites were homophonous. However, at least for Nêhiyawêwin, this is no longer the case synchronically. Consequently, with respect to Cheng's claim that a wh- *in situ* language will have homophonous wh-words and indefinites, one can conclude that Nêhiyawêwin wh-words do not have this property. In addition, even the Cree dialects where (partial or complete) homophony exists between wh-words and indefinites, the wh-environment is distinguished by: (i) obligatory initial position, and (ii) the use of the conjunct verb form. By contrast, indefinites behave like ordinary NPs: (i) they can occur either before or after the verbal complex, (ii) they freely occur with the independent form of the verb.¹²

3.2.5 Evaluating the Wh- *in situ* Hypothesis

The table in (42) summarizes Cheng's wh-*in situ* diagnostics for the three Cree dialects discussed in this section: Nêhiyawêwin, Swampy Cree and Moose Cree.

(42)	Nêhiyawêwin	Swampy C.	Moose C.
Q-Particle: Y/N	yes	yes	yes
Q-Particle: Wh-	?	?	?
Ambig: who/someone	no	no	yes
what/something	no	yes	yes
Free Ordering of wh-word	no	no	no

¹² Whether or not these forms constitute polarity items is a matter for further study. However, note in Section 3.1.3.3 with respect to independent mode in wh-questions, that in some sub-dialects there is an indefinite interpretation in "rhetorical" interpretations of a question.

No Cree dialect clearly satisfies all of the *wh- in situ* diagnostics listed in (42). For example, with respect to the claim that, in a *wh- in situ* language, both yes/no questions and *wh*-questions will be associated with a Q-particle, the surface evidence is inconclusive: although yes/no questions are uncontroversially marked by a second-position Q-particle (*ci* in Nêhiyawêwin, *na* in Moose Cree and *nâ* in Swampy Cree), the existence of a Q-particle in *wh*-questions is moot.

With respect to the claim that a *wh- in situ* language will have *wh*-polarity items (i.e., forms that are ambiguous between a *wh*-interpretation and indefinite interpretation), there is considerable dialectal variation: *wh*-forms and indefinites are homophonous in Moose Cree, partially homophonous in Swampy Cree, and completely distinct in Nêhiyawêwin. Finally, inasmuch as a *wh- in situ* analysis predicts that *wh*-words will occupy the same positions as ordinary NPs, note that *wh*-words are constrained to clause-initial position (in contrast to the free ordering of ordinary NPs, (cf. Section 3.1)). This strongly suggests that whatever position *wh*-words occupy, it is not the same position occupied by ordinary NPs. In sum, Nêhiyawêwin is not a *wh- in situ* language.

3.3 The Wh-movement Hypothesis

In order to properly evaluate whether or not Nêhiyawêwin *wh*-questions are formed by *wh*-movement, it is important to distinguish (overt) *wh*-movement from null-operator movement, a distinction which was introduced in Chapter 1. English relative clauses exploit both strategies (43) but English *wh*-questions are only compatible with overt *wh*-movement, (44).

(43.a) This is [the man [who_i [I talked to t_i]]]

b) This is [the man [Op_i [I talked to t_i]]]

(44.a) [Who_i did [John see t_i]]]

b) *[Op_i did [John see t_i]]]

This section (3.3) considers whether there is overt wh-movement in Nêhiyawêwin, and concludes that there is not. However, wh-questions must have some form of operator movement in order to have wh-interpretation. In the following section, I argue that, if Nêhiyawêwin wh-questions do not have overt wh-movement, then they must have null-operator movement, i.e., the wh-word is linked to a null operator.

3.3.1 Wh-movement as A'-binding

Overt wh-movement involves the movement of a wh-word out of an argument position to Spec CP. The wh-word in operator position c-commands and binds its trace in an operator-variable relationship. Because the wh-word occupies a non-argument (A') position, this is an instance of A'-binding.

(45) Who_i did John see t_i?
|—————|

In classical government and binding theory (Chomsky 1981, 1982, 1985), a wh-trace is the non-overt counterpart of an R(eferential)-expression. At first glance, treating the trace of wh-movement as a kind of R-expression might seem counterintuitive. The treatment of wh-traces as R-expressions is motivated by binding theory. Ordinary R-expressions are free

within the domain of their clause, a so-called Condition C effect of binding theory. The same is true of wh-traces, (46).¹³

(46.a) *[She_i saw Mary_i]

b) *[who_i did [she_i see t_i]

With the system of NP features proposed by Chomsky (1981), ordinary R-expressions and wh-traces are both defined as [-pronoun, -anaphor]. They are distinguished from each other by means of the features [\pm overt]: R-expressions being [+overt] and wh-traces being [-overt]. This classification fits into the system of NP types summarized in (47).

(47). NP features

Pron	Anaph	Overt	
+	-	+	pronouns
+	-	-	<i>pro</i>
-	+	+	lex. anaphors/reflexives
-	+	-	NP trace
-	-	+	R-expr. // Resump. pron.
-	-	-	wh-trace // <i>pro</i> ¹⁴
+	+	+	---
+	+	-	PRO

¹³ Example (46.b) illustrates Strong Crossover: a wh-word cannot be co-indexed with a pronoun that c-commands it. The relevance of Strong Crossover to the wh-movement hypothesis is taken up in more detail below (Section 3.3.3).

¹⁴ *pro* is typically classified as a [-overt] pronoun ([+pron] [-anaph]) as seen above. We have seen that a resumptive pronoun ([-pron] [-anaph]) occurs in an A'-position A'-bound by a left-dislocated NP (cf. Cinque 1990). Therefore, the question arises whether the empty category in A'-position coindexed with an IP-adjoined overt NP might be its [-overt] counterpart.

Note that movement of a wh-word creates the operator-variable chain $\langle \text{wh}, t \rangle$. By contrast, in null-operator movement, it is the movement of a *pro* which creates the operator variable chain (cf. Browning 1982, Cinque 1990). Unlike a quantificational operator which has a range, the null-operator has no range and therefore requires an antecedent in order to fix its range.

In Nêhiyawêwin, the clearest evidence of the absence of overt wh-movement involves the prohibition of multiple wh-questions.

3.3.2 Multiple Wh-questions

In a language where wh-words are generated in argument position -- independent of whether the wh-word remains *in situ* or subsequently undergoes movement (as in English) -- the occurrence of multiple wh-words is possible.

In wh- *in situ* languages such as Chinese (cf. Cheng 1991), both wh-words occur in argument positions, (48). Another possibility is for both wh-words to undergo overt movement, e.g. the Slavic languages (Rudin 1988) as well as Mohawk, an Iroquoian language (Baker 1996:92, fn.38). Mohawk examples are provided in (49). A third possibility is for one wh-word to move and the other to remain *in situ*, e.g., English where the wh-word in subject position moves (string vacuously) at S-structure, while the wh-word in object position remains *in situ* and moves at LF, (50).

(48) **Wh- *in situ*: Chinese**

shei mai-le sheme (ne)
 who buy-ASP what (Q_{wh})
 'Who bought what?'

(49) **Multiple Wh-movement: Mohawk**

- a) tak-hróri úhka nahótv wa'-e-hnínu-'
2sS.imper/1/sO-tell who what fact-FsS-buy-punc
Tell me who bought what.
- b) tak-hróri nahótv úhka wa'-e-hnínu-'
2sS.imper/1/sO-tell what who fact-FsS-buy-punc
Tell me who bought what.

(50) **Wh-movement & Wh- in situ: English**

Who bought what?

Thus, multiple wh-questions differ according to whether the language exploits a uniform *in situ* strategy (e.g. Chinese), a uniform movement strategy (e.g. Mohawk), or a mixed strategy (English). However, not all languages permit multiple wh-questions.

In Berber and Italian, Calabrese (1984, 1987) has observed that multiple wh-questions are not allowed. Example (a) is from Italian and (b) is from Berber (Calabrese 1987:118):

- (51.a) *Che cosa hai dato a chi?
What did you give to whom?
- b) *maymi m-ay t-sghu terbalt?
why what-that 3fs.bought girl
Why did the girl buy what?

Calabrese has argued that the absence of multiple wh-words is a diagnostic for clefts in those languages. In Calabrese's analysis, a wh-word must be a focussed NP, i.e., *Who is it*

[that ...]; and states, "the cleft position is an argument internal to the copular predicate, and in a copular predicate there can be only one argument (1987:118)."¹⁵

Multiple wh-questions are disallowed in Nêhiyawêwin. Consider the following examples:

(52.a) * **awîna** ê-itwê-t **kîkwây**
 who conj-say so-3 what
 Who said what? cf.J.478

b) * **awîna** kê-pîkiskwât-â-t **awîna-wa**
 who rel-speak to s.o.-dir-3 who-obv
 Who spoke to whom? D.283

A multi-clausal sentence can have two wh-words; however, they cannot both be associated with the same verb.

(53) **awîna** kiskêyiht-am-(w) **tânêhki** kê-sipwê-t
 who know s.t.-th-(3) why rel-leave-3
 Who knows why he left? B.169

Each wh-word occupies clause-initial position in a separate clause.

I therefore propose that Nêhiyawêwin wh-phrases, like focussed NPs, are clefted.

Consider the following clefted sentences:

(54) Clefted NPs:

a) **êko John** [Mary kê-wâpam-â-t]
 the very one John Mary rel-see-dir-3
It is John [that Mary saw].

¹⁵ It stands to reason that both arguments in a sentence cannot be clefted or focussed -- unless, of course, one of them can remain in argument position at S-structure as in the following English example: *No, [it is ME] who hit HIM!* In this sentence, the first-person pronoun is focussed structurally in a cleft (and possibly also with stress), while the object HIM is focussed by stress alone while remaining in object position.

b) **John** *ana* [Mary *kâ-wâpam-â-t*]
 John that (one) Mary rel-see-dir-3
It is John [that Mary saw].

c) Wh-Cleft:

awîna *ana* [Mary *kâ-wâpam-â-t*]
 who that (one) Mary rel-see-dir-3
Who is it [that Mary saw]?

In the bolded clefted structures in the English glosses, the NPs *John* and *who* are in an equative relation (which requires a copula) with a dummy subject, *it*. Nêhiyawêwin does not use a copula, so the equative structures in Nêhiyawêwin in both cases simply involve two NPs. Rather than a dummy pronoun, I propose that Nêhiyawêwin can use an empty pronoun *pro* as one of the nominals -- with or without deictic *ana* 'that' as shown in (c). These issues will be discussed at length in Chapters 4 and 5.

In summary, I have shown that wh-words in Nêhiyawêwin are always clause initial -- a fact which argues against the possibility of *wh-in situ*. I have also argued that the absence of multiple wh-questions provides evidence that wh-words do not originate in the argument positions of a verb.

In line with Calabrese's (1984, 1987) claim that the absence of multiple wh-questions in a language is indicative of wh-clefts, I propose that Nêhiyawêwin wh-words are clefted.¹⁶

¹⁶ In the following chapters, several patterns of wh-questions are discussed. My analysis provides different structural accounts for the different patterns -- and not all of them are, in fact, "clefted". Therefore, the use of the term here is to be taken loosely to signify that the wh- NP does not occur internal to the verbal clause.

In other words, the wh-word is contained in a equative structure, i.e., “**Who is it** [that ...]”.¹⁷

As we shall see in Chapter 4, this nominal clause may stand alone or be combined with another verbal clause in a variety of patterns.

The absence of multiple wh-questions in Nêhiyawêwin suggests there is no wh-movement.

3.3.3 Strong Crossover

Another diagnostic of wh-movement is Strong Crossover (SCO), introduced above in Section 3.3.1. The term describes the strong ungrammaticality which results if a wh-trace is bound by a c-commanding pronoun. Representative examples of SCO are given in (55).

- (55.a) * Who_i did [she_i see t_i]
b) * Who_i did [she_i think [she_i saw t_i]]
c) * Who_i did [she_i think [t_i saw you]]

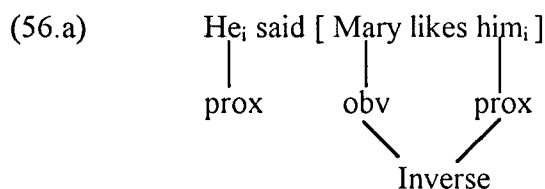
Unfortunately, SCO cannot be used as a test for wh-movement in Nêhiyawêwin because of the confounding factor of the direct/inverse contrast.

¹⁷ This claim is not new. Wolfart (1973:34) states that the wh-word *awîna* 'who' i) may stand alone as a complete utterance; ii) may occur in an equational sentence; or iii) it may function predicatively “with a conjunct clause depending on it”, i.e., a verbal clause with *ê-* or *kâ-* complementizer or “conjunct marker”. As noted in Chapter 1, clefted wh-questions have also been proposed by Johns (1982) for Ojibwa and by Reinholtz and Russell (1995) for Swampy Cree -- though they do not consider the consequences of this proposal in detail.

3.3.3.1 Strong Crossover in Nêhiyawêwin

Strong Crossover effects cannot be checked in Nêhiyawêwin, as shown in the following examples. In this respect, it is important to recall (from Chapter 2) the role played by the direct/inverse morphology as well as the distinction between proximate and obviative third persons. The example in (56.a) involves three argument positions with two third persons, one being proximate and the other obviative. The coindexed pronominals have proximate status, while *Mary*, the other third person, is obviative. Proximate status is assigned initially to the pronominal subject in the main clause of (56.a) for two reasons:¹⁸

- (i) In the elicitation context, it is the first third person used so it will typically be assigned the unmarked status.
- (ii) Add to this the fact that this argument is the main clause subject (i.e., sentential topic) and the fact that it is a pronoun and must be “old information” -- all these are properties of proximate third person.



In the subordinate clause, the subject *Mary* is obviative and is disjoint in reference from the matrix clause subject (and obligatorily disjoint in reference with the subordinate clause object). The object pronoun -- which is coindexed with the (proximate) subject of the

¹⁸ Also, in a discourse context, there can only be one proximate third person in a given span, whereas there may be more than one obviative third person. Therefore, coreference is a natural (though not obligatory) interpretation of proximate arguments (cf. Grafstein 1984).

main clause -- must also be proximate. Accordingly, the verb in the subordinate clause with an obviative subject and a proximate object will be inverse. The Nêhiyawêwin equivalent for the sentence in (a) with the coreference shown is given in (56.b).

- (56.b) ê-itwê-t Mary-wa ê-miywêyim-iko-t
 conj-say-3 Mary-obv conj-like-inv-3 3 → 3' Inverse
 He_i said Mary likes him_i
 | | |
 prox obv prox
 \ /
 Inverse

The corresponding wh-question is shown in (57). The SCO English gloss is ungrammatical; however, the Nêhiyawêwin sentence is perfectly good with the licit English interpretation shown.

- (57) awîna ê-itwê-t Mary-wa ê-miywêyim-iko-t
 who conj-say-3 Mary-obv conj-like-inv-3 3 → 3' Inverse
 Who_i did he_i said Mary likes him_i?
 >> Who_i t_i said Mary likes him_i?

Since the wh-word is proximate and the subject of the main clause is proximate, they must be the same person.

3.3.4 Weak Crossover

Weak Crossover (WCO) defines situations where wh-movement takes place over a complex DP containing an embedded coindexed pronoun as in the examples in (58.b-c). The simple pronominal DP in subject position of the SCO example in (58.a) is replaced by a possessive DP as subject in (b) and a relative clause DP as subject in (c).

- (58.a) * Who_i did [[she_i]_{DP} see t_i] SCO
- b) * Who_i did [[her_i mother]_{DP} see t_i] WCO (possessive DP)
- c) * Who_i did [[the woman [that he_i loves]_{CP}]_{DP} see t_i] WCO (relative clause)

The pronoun in the complex DP does not c-command the trace; but neither does the trace c-command the pronoun. In both WCO examples (b) and (c), the coindexation shown is ungrammatical. The WCO evidence is characterized by a subject/object asymmetry with respect to the extraction site. In the ungrammatical examples above, wh-movement takes place object position (passing over the DP in subject position). When the wh-extraction is from subject position with the complex DP in object position, the sentences are good, as shown in (59).

- (59.a) Who_i [t_i saw [her_i mother]?
- b) Who_i [t_i saw [[the woman [that he_i loves]]?

WCO is used as evidence for wh-movement in English; therefore, these WCO examples in other languages should show the same grammaticality contrasts. If the results are different, then this must reflect a difference (structural or otherwise) between the languages in question. In the course of the following discussion, we will see evidence for three sets of contrasts with respect to WCO: (i) Mohawk is different from English; (ii) Nêhiyawêwin is different from English; and (iii) Nêhiyawêwin is different from Mohawk.

The details of WCO and my analysis for Nêhiyawêwin are discussed in more detail in Chapter 6. The point here is simply to illustrate the difference between Mohawk and Nêhiyawêwin with respect to wh-movement. Mohawk, like Nêhiyawêwin, is a rich head-

marking language. For both languages, it is claimed that overt NPs do not occupy argument positions at S-structure but are adjoined to IP. This includes possessor DPs and relative clause DPs. Baker (1996) claims that there is overt *wh*-movement in Mohawk; and we will compare evidence in the two languages.

3.3.4.1 Possessor DPs: Mohawk vs. Nêhiyawêwin

In this sub-section, we see that the WCO facts for both Mohawk and Nêhiyawêwin differ from the English WCO facts involving possessor phrases.

Possessive DPs in Mohawk show no contrast for WCO effects; both are grammatical, in contrast to the subject/object asymmetry found in English. Compare the two sets of examples in Mohawk and English (as represented in the gloss).¹⁹

(60) Mohawk:

- a) Uhka wa'-te-shako-noru'kwanyu-' rao-skare'
 who fact-dup-MsS/FsO-kiss-punc MsP-friend
 Who_i kissed his_i girlfriend?
- b) Uhka wa'-te-shako-noru'kwanyu-' ako-skare'
 who fact-dup-MsS/FsO-kiss-punc FsP-friend
 *Who_i did her_i boyfriend kiss?

The (a) example is grammatical in both Mohawk and English. The (b) example should not be good, but (b) is good in Mohawk.

¹⁹ In the Mohawk example, the possessor phrase may be located preceding the verb without affecting the results (M. Baker, p.c.).

Nêhiyawêwin DPs, like those in Mohawk, are adjoined to IP; and WCO also does not hold in Nêhiyawêwin possessor phrases (Blain 1992).

(61) **Nêhiyawêwin:**

- a) awîna kê-nawaswât-â-t o-têm-a
 who REL-chase-dir-3>3' 3-dog-obv
 Who_i is chasing his_i (own) dog?
- b) awîna o-têm-a kê-nawaswât-iko-t
 who 3-dog-obv REL-chase-inv-3'>3
 *Who_i is his_i dog chasing? B.152
 OR, Whose_i (own) dog is chasing him_i? (pref. Eng. gloss)

There is no subject/object asymmetry with respect to the grammaticality of these sentences in either Mohawk or Nêhiyawêwin in contrast to English. The specifics of Baker's (1996) analysis for Mohawk are discussed in Chapter 6 -- as is my own analysis for Nêhiyawêwin. However, Baker claims that there is overt wh-movement in Mohawk; and the evidence so far shows that Mohawk and Nêhiyawêwin behave in the same manner.

3.3.4.2 Relative Clause DPs: Mohawk vs. Nêhiyawêwin

In this sub-section, we see that the WCO facts for both Mohawk differ from both English and Nêhiyawêwin WCO facts involving relative clauses.²⁰

Baker shows that there is no subject/object asymmetry in Mohawk relative clauses and that bound-variable readings for both are ungrammatical. The Mohawk example in (62.a) represents the object-related relative clause which is good in English but bad in

²⁰ We see only evidence for relative clause in object position. We will see in Chapter 6 that the Nêhiyawêwin relative clauses in subject position allow two alternative interpretations -- in contrast to the English evidence.

Mohawk. The (b) example illustrates that the same example in Nêhiyawêwin is good. It can be concluded from this contrast in the WCO evidence that Mohawk and Nêhiyawêwin are different.

(62.a) *Uhka wa'-t-huwa-noru'kwanyu-' **ne rukwe ne ruwa-nuhwe'-s**
 who fact-dup-FsS/MsO-kiss-punc NE man NE FsS/MsO-like-hab
 Who_i kissed the man she_i likes?

b) awîna kâ-ocêm-â-t **anihi nâpêw-a kâ-takakêyim-â-t**
 who rel-kiss-dir-3 that man-obv rel-like-dir-3
 Who_i kissed the man that she_i likes? J.388

Baker's account of the Mohawk weak crossover evidence uses a parasitic gap analysis to account for the difference between possessor NPs (which are always good) and relative clauses (which are always bad). In the account of his analysis in Chapter 6, we will see that the relevant property of parasitic gaps is that the c-command capacity of the operator in the gap construction is sensitive to subjacency. Relative clauses provide a subjacency environment while possessive DPs do not. Given the contrast in (62), this analysis is not available in Nêhiyawêwin.

We have a three distinct situations with respect to the WCO evidence seen above. As shown in (63), Nêhiyawêwin and Mohawk contrast with English with respect to WCO with possessor phrases; and Nêhiyawêwin and English contrast with Mohawk with respect to the relative clause evidence for WCO.

(63) **WCO Contrasts**

	English	Nêhiyawêwin	Mohawk
Possessor Phrase	WCO	no WCO	no WCO
Rel. Clause (Object)	no WCO	no WCO	WCO

In summary, we have seen from the wh-movement evidence that Mohawk and Nêhiyawêwin are different in two respects: (i) multiple wh-words are possible in Mohawk but not in Nêhiyawêwin, and (ii) the WCO evidence is different between the two languages. As noted above (and as will be discussed in Chapter 6), Baker (1996) argues that there is overt wh-movement in Mohawk; therefore, this cannot be the case for Nêhiyawêwin. There is one more possibility to consider: that wh-questions involve null-operator movement.

3.4 The Null-operator Movement Hypothesis

As discussed above, wh-questions require an A'-chain involving a operator and a trace/variable. This means there has to be an operator and the operator must move. The operator may be the overt wh-word or it may be null; and in either case, the movement may occur either at S-structure or at LF. (64) illustrates the four possible combinations of these variables.

(64) Nêhiyawêwin Wh-operators:

	Overt Operator	Null Operator
SS movement	*wh-movement	<i>kâ-</i> complementizer
LF movement	*wh- <i>in situ</i>	<i>ê-</i> complementizer

We have seen that there is no overt operator in the verbal clause of a Nêhiyawêwin wh-question, i.e., there is neither S-structure wh-movement of an overt wh-operator nor is there LF movement of an *in situ* wh-word. That leaves the possibility of a null operator. In

Chapter 5, I discuss null operator movement in more detail and argue for the pattern of movement illustrated in (64).

3.4.1 The Antecedent Condition on Null-operator Movement

A wh-word in operator position has inherent semantic content by virtue of its interrogative force: as such it restricts the range of the trace/variable it is coindexed with, (62.a). But a null-operator (*pro*) does not have inherent semantic content, and so cannot restrict the range of the trace/variable with which it is coindexed. Consequently, the null operator requires an antecedent in order to fix the range of its variable. If the antecedent of the null-operator is a wh-word, this yields a wh-question interpretation, (65.b).

(65.a) [CP wh_i [IP ... t_i ...]

b) [wh_i] [CP Op_i [IP ... t_i ...]

This predicts that a wh-word undergoing movement as in (62.a) will be structurally distinct from a wh-word which serves as the antecedent to a null operator. The moved wh-word is contained in the same clause as the variable that it binds and is predicted to exhibit the usual properties of A'-chains. The antecedent wh-word is outside of the CP which contains the < Op, t > chain. The Nêhiyawêwin evidence is consistent with (b): wh-words are not in argument position, nor do they move to Spec CP of the verbal clause they are construed with.

If Nêhiyawêwin wh-questions involve null-operator movement, in addition to the standard properties of A'-chains listed above and copied in (i) to (v) below, we also expect them to have a wh-antecedent outside the CP which contains the operator as shown in (vi).

- (i) there is an operator in Spec CP
- (ii) a gap is involved
- (iii) the wh-word is related to the gap by movement
- (iv) the relation between the wh-word and the gap is subject to subadjacency
- (v) the relation between the wh-word and the gap is unbounded
- (vi) the null operator is linked to a wh-antecedent

In Chapter 4, I will argue that this wh-antecedent is the predicate of a nominal clause, an [NP (is) NP] construction with a subject and a predicate, both nominals.

3.5 Comments

The results of this chapter establish what Nêhiyawêwin wh-questions are not. In the following chapters, we look at what Nêhiyawêwin wh-questions are. The first step is to show that wh-words are licensed as predicates of a nominal clause (Chapter 4). Then I argue that this nominal clause is in turn associated with the verbal clause within which null operator movement has applied (Chapter 5). I establish that, despite surface appearances, in Nêhiyawêwin, the first three properties of wh-constructions hold: the wh-word is in Spec CP (of a nominal clause); there is a gap (in the nominal clause); and the wh-word is related to the gap by movement (specifically, predicate-fronting).

The final chapter turns its attention to the remaining two properties of wh-questions as they pertain to Nêhiyawêwin, namely subjacency effects and (un)boundedness. In Chapter 6, I will discuss Baker's analysis for Mohawk in more detail as well as presenting my analysis to account for the Weak Crossover evidence in Nêhiyawêwin.

Chapter 4

NOMINAL CLAUSES

4.0 Introduction

Chapter 3 began our investigation of wh-questions in Nêhiyawêwin. We saw that wh-words are not *in situ* in argument position of the verb -- nor is there overt wh-movement from an argument position. In fact, I have argued that the wh-word never originates inside a clause containing a verb, but that the wh-word is generated in a position outside of and preceding the verbal clause. I refer to this sentence-initial position as a “clefted” position until the structures can be determined. The goal of this chapter is to investigate the structure of clefted NPs, including wh-words, in Nêhiyawêwin:

The following examples involve clefted/focussed constructions in Nêhiyawêwin, for example:

- (1.a) John êko [CP kâ-sipwêhtê-t]
John the very one rel-leave-3
[It's John] that left.
- b) êko John [CP kâ-sipwêhtê-t]
the very one John rel-leave-3
[It's John] that left.

In these focussed structures, the two NPs, i.e., *John* and the pronominal *êko* 'the very one (previously mentioned)', may alternate in their positions preceding the *kâ*- clause (analyzed as a relative clause with null-operator movement). Though both sentences are elicited in the same manner as shown by the gloss, either NP may be in initial position.

Another way of focussing an NP involves the deictic *ana* 'that (one)' as shown in (2).

With a deictic DP, only *John* can be in initial position of the nominal clause; the clause-initial deictic in (b) is not grammatical in a focussed construction, as shown.

(2.a) John ana [CP *kâ-sipwêhtê-t*]
 John that (one) rel-leave-3
 [It's John] that left.

b) *ana John [CP *kâ-sipwêhtê-t*]
 that (one) John rel-leave-3
 ≠[It's John] that left.

The examples in (3) show a clefted/focussed wh-phrase with deictic *ana* 'that one'.

Again, only the wh-word may occur in initial (predicate) position. The reverse ordering as shown in (b) is ungrammatical.

(3.a) awîna ana [CP *kâ-sipwêhtê-t*]
 who that (one) rel-leave-3
 [Who is it] that left?

b. *ana awîna [CP *kâ-sipwêhtê-t*]
 that (one) who rel-leave-3
 [Who is it] that left?

The examples above include both focussed NPs and wh-clefts; and in all the examples, the clefted structures in the English glosses involve a nominal clause in which both the subject and the predicate are nominal constituents. In all cases, the nominal clause is associated with an operator-variable structure in the verbal clause. I propose the same analysis for Nêhiyawêwin, i.e., the two nominal constituents occur in a separate nominal clause which is followed by a verbal clause with the relativizing *kâ-* complementizer. Nêhiyawêwin, like many languages, does not have a copula in any of these nominal clause constructions (cf. Déchaine 1993).

It is necessary to study nominal clause structures in Nêhiyawêwin for the following reason. Given that the *wh*-word does not originate inside the clause, the *wh*- NPs must be licenced by some other means, i.e., by predication inside a nominal clause. This is what occurs in the case of focussed *wh*-examples in English as shown in (3); and this will be my analysis for all argument-type¹ *wh*-words in Nêhiyawêwin.

In this Chapter, we will be looking at nominal clauses in both English (Section 4.1.1) and in Nêhiyawêwin (Section 4.1.2). In the course of the investigation, I will show that the ordering in Nêhiyawêwin nominal clauses is predicate initial, and that predicate-subject asymmetries in Nêhiyawêwin reveal a referential hierarchy similar to that for English (Heggie 1988). In this hierarchy, deictic DPs are the most referential and indefinites, including *wh*-words, are the least referential.

In Section 4.1.3, I discuss agreement between the NP constituents of nominal clauses. Predicational agreement in nominal clauses without a verbal constituent (copula) is typically restricted to the inherent lexical features of a noun, e.g., gender and number. However, there is also proximate/ obviative agreement between the subject and predicate in Nêhiyawêwin nominal clauses. I use this additional agreement feature to motivate predicate fronting -- which accounts not only for the agreement facts but also for the predicate-initial ordering in Nêhiyawêwin. As a result, the sentence-initial *wh*-word is part of the more general operation of predicate fronting in all nominal clauses.

¹ Argument-type *wh*-words include only the *who* and *what* forms. Adverbial *wh*-words are not part of this analysis. As non-arguments (without *pro* in A-positions), it may be the case that they can move to the Spec CP position as in English. Hamida Demirdache (p.c.) notes that this contrast exists with Egyptian Arabic *wh*-words.

Based on the analysis of nominal clause structures (including wh-phrases) in this chapter, we will go on to provide an analysis for wh-questions in Chapter 5.

4.1 Nominal Clauses

A nominal clause is a sentence in which both the subject and the predicate are nominals, i.e., [NP is NP] as in (4).

(4.a) [DP John] is [DP the chief].

b) [DP The morning star] is [DP the evening star]

There are two types of nominal clause constructions discussed at length in the literature (cf. Higgins 1973, Rapoport 1987, Heggie 1988, Moro 1990, Williams 1994); these are (i) equative nominal clauses, and (ii) predicative nominal clauses. We will look at examples of both types and discuss the properties of each.

4.1.1 English Nominal Clauses

In order to provide an analysis for the clefted structures, we must consider the properties and structures involved with the simpler nominal clause as in (4.a). To set the scene, we will consider the theoretical issues by looking at nominal clause structures in English. Nominal clauses involve two nominal expressions in a subject-predicate relationship. One can view these structures in terms of the properties of the subject, which is usually more referential than the predicate (Heggie 1988), or, conversely, at properties of the nominal predicate (Rapoport 1987). Heggie (1988:106) argues for the following hierarchy of reference, based on the subject-predicate asymmetry:

(5) **Hierarchy of Reference:** (Heggie (1988:106))

deictic > names > definite descriptors > indefinites

[subject] —————→ [predicate]
more referential less referential

Proceeding from left to right, the constituents are decreasingly referential and more predicate-like. According to this hierarchy, deictic DPs have the highest referentiality -- they actually point to someone in the discourse. Names and definite descriptors, by definition, refer to a specific individual or unique thing in the discourse -- while indefinites do not. This hierarchy allows us to compare the properties of equative and predicative nominal clauses.

4.1.1.1 Predicative Nominal Clauses

The first type of nominal sentence we will look at is the predicative construction. In predicative sentences, there is an asymmetry between the referentiality or rigidity of two nominals. The subject DP must be more rigid/referential than the predicate. This is illustrated in the following sentences:

(6.a) [sub_j He] [pred is a moron].

b) [sub_j Mary] [pred is a genius].

The examples above illustrate the canonical (subject-predicate) order (Ruwet 1982) for English. In (a), the pronoun has no intrinsic reference but its referent must be identified in the discourse and is therefore specific. However, the indefinites *a moron* and *a genius* describe a property of a person -- and they cannot be referential. The indefinite cannot be in subject position, for example:

(7.a) *_[subj] A moron _[pred] is he/him].

b) *_[subj] A genius _[pred] is Mary].

One of the diagnostics for predicative structures involves agreement features. In Italian, the copula can agree only with the more referential DP (i.e., the DP which is more salient with respect to subjecthood) even when it is not in the canonical subject-initial position (cf. Moro 1990:15). In (8.a), the copula *sono* 'are' agrees in number with the following DP *loro* 'them' rather than with the DP *la causa* 'the cause' which precedes the copula.

(8.a) La causa sono loro
 the cause (sg) are them (pl).

b) *La causa è loro
 the cause is them

Pronouns must have a referent in the discourse and are the equivalent of a name -- which according to Heggie's hierarchy in (5) are more referential than definite descriptors.

By contrast, the copula in English always agrees with the initial DP (which is analyzed as the subject on the basis of linear ordering).²

(9.a) (i) The problem is them.

 (ii) *The problem are them.

b) (i) They are the problem.

 (ii) *They is the problem.

² For further discussion of the asymmetries between the DPs, I refer the reader to Ruwet (1982), Moro (1990) and Rapoport (1987) which look at a wider range of evidence.

Clefting is used as a diagnostic to show which nominal in a predicative structure is more referential (Heggie 1988:80). Consider the possibilities for the predication sentence in (10) which has the canonical subject-predicate ordering in asymmetrical nominal structures, only the more referential DP in the canonical ordering may be clefted; and names are more referential than possessor DPs. Therefore, in (b), the more referential subject may be clefted while in (c), the predicative nominal cannot be clefted. Note that [...] marks the original position of the clefted constituent.

(10.a) [subj John Smith] [pred is my doctor].

b) It's [subj John Smith] that ... is my doctor.

c) *It's [pred my doctor] that John Smith is

Now we will consider the inverse ordering (Ruwet 1982) with the two DPs reversed as in (11.a). In the inverse ordering (cf. Heggie 1988), the less referential initial DP is reanalyzed as the subject as shown in (a). As we see, neither the less referential (subject) DP in (b) nor the more referential nominal (as predicate) in (c) can be clefted.

(11.a) [subj My doctor] [pred is John Smith].

b) *It's [subj my doctor] that ... is John Smith.

c) *It's [pred John Smith] that my doctor is

According to the hierarchy in (5), deictic DPs are the most referential; and accordingly, only the more referential deictic DP can be clefted. A nominal sentence with canonical subject-predicate ordering is shown in (12.a) (Ruwet 1982). Only the the more referential subject nominal can be clefted as seen in (b) and (c).

(12.a) [subj That man over there] [pred is Jack Jones].

- b) It's [_{subj} that man over there] that ... is Jack Jones.
- c) *It's [_{pred} Jack Jones] that that man over there is.

The following set involves the inverse ordering with the less referential DP in initial position. As in (11) neither DP can be clefted.

- (13.a) [_{subj} Jack Jones] [_{pred} is that man over there].
- b) *It's [_{subj} Jack Jones] that ... is that man over there.
- c) *It's [_{pred} that man over there] that Jack Jones is

The patterns we have seen above reveal the asymmetry between the two nominals in predicative structures. In the canonical ordering, the more referential subject DP can be clefted while the predicate DP cannot be. In the inverse ordering where the more referential DP is in the predicate position, neither DP can be clefted.

Diagnostics which are sensitive to the properties of the predicative constituent include: i) the *albeit* test, and ii) *though* preposing.³ The examples in (14) are in the canonical ordering with the referential nominal as subject. In (a), the indefinite predicate *a fool* can be qualified by the *albeit* phrase; while (b) shows that a name in predicate position cannot be.

- (14.a) [_{subj} Mixal] [_{pred} is a fool], albeit cunning.
- b) *[_{subj} The chair of the department] [_{pred} is Jane Smith], albeit on leave.

Similarly with the *though* preposing test. The *though* preposing diagnostic requires dislocation of the predicate of a copular clause and contrasts two property-denoting characteristics which may be applied to the subject DP. These examples illustrate that a

³ This test is credited to Ken Hale (Rapoport 1987:133 ff)

property-denoting nominal predicate (whether indefinite or definite) may be preposed with *though*, as shown in (a) and (b). In (c), the preposed predicate is adjectival.

(15.a) [_{pred} A fool] *though* Mixel is ..., she is cunning.

b) [_{pred} The chief] *though* Mary is ..., she is well liked.

c) [_{pred} Proud] *though* Tali is ..., she is kind.

The sentence in (a), for example, the subject is *Mary* and preposing of the predicate *a fool* contrasts two properties of Mary, i.e., she is a fool, and she is cunning.

On the other hand, in the inverse sentences in (16), the fully referential DPs (which are not property denoting) cannot be preposed over the less referential DP.

(16.a) * [_{pred} Jane Smith] *though* the chair is ..., she is stupid.

b) * [_{pred} That woman over there] *though* Tali is ..., I didn't recognize her.

c) * [_{pred} Mary] *though* the chief is ..., she is well liked.

Similarly with the *albeit* test in (17):

(17.a) [_{subj} Mary] [_{pred} is the chief], *albeit* a woman.

b) * [_{subj} The chief [_{pred} is Mary], *albeit* a woman.

Again, the *albeit* phrase contrasts properties of the two nominals. Though both *Mary* and the definite DP, *the chief*, may be referential (cf. Williams 1994:42), they need not be. Of the two DPs, only *the chief* may denote a property (insofar as it represents a position which any person may attain). The two DPs are asymmetric and this asymmetry is captured in Rapoport's tests.

In summary, we have seen evidence for Heggie's (1988) hierarchy of reference in (5), which is repeated here:

(5) **Hierarchy of Reference:** (Heggie (1988:106)

deictic > names > definite descriptors > indefinites

[subject] —————> [predicate]
more referential less referential

The least referential DPs are indefinites. We have seen that they may occur only as property-denoting predicates, and inverse sentences with the indefinite DP in initial position are not generally felicitous (unless both nominals are indefinite).

The other three categories -- definite DPs, names and deictics -- are more flexible and generally can occur in either subject or predicate position in a copular sentence in English. However, in the canonical ordering, they occur in accordance with the order shown in the hierarchy in (5). In other words, a deictic DP is the canonical subject in relation to a name or a definite DP; and a name is the canonical subject in relation to the definite DP, but the canonical predicate in relation to the deictic DP.

The hierarchy in (5) will be used as a guide in the investigation of nominal clause structures in Nêhiyawêwin.

4.1.1.2 Equative Nominal Clauses

In equative sentences, both nominal constituents are equally referential (Heggie 1988).⁴ In other words, there is no asymmetry between the subject and the predicate; for example, in (18.a) both terms refer to the same star. In the context of the movie, *Chinatown*, both DPs in (b) have the same specific referent. These sentences are equational:

⁴ See also the work of Moro (1990) following Higgins (1973).

(18.a) The morning star is the evening star.

b) My daughter is my sister.

The first DP is in subject position while the second is in predicate position in the copular structure. Both of the DPs must have a specific referent and that referent must be one and the same person/thing in both cases.⁵ In equative sentences, the two DPs are interchangeable.

(19.a) i) The evening star is the morning star.

ii) The morning star is the evening star.

b) i) My sister is my daughter.

ii) My daughter is my sister.

We will be looking at different kinds of tests to determine the properties of the constituent DPs. For example, Heggie (1988:80) tests for the more referential DP using a cleft construction (revealing that the less referential predicate nominal cannot undergo clefting). If the two DPs are symmetrical (equally referential), then we predict that there will be no asymmetries in the clefting patterns regardless of which constituent is in subject position. Take one of the equative sentences in (19.a), for example. As the illustrations in (20) show us, the subject nominal in (b) may be clefted but the predicate in (c) cannot be:

(20.a) [_{subj} The morning star] is [_{pred} the evening star].

b) It's [_{subj} the morning star] that is the evening star.

c) * It's [_{pred} the evening star] that the morning star is.

⁵ Alternatively, both DPs can be equally non-specific, i.e., *A man is a human being*.

Now if we reverse the same two nominals, the clefting test will show exactly the same results, i.e., the subject nominal may be clefted while the nominal in predicate position cannot be. This shows that there is no asymmetry between the two nominals.

(21.a) [_{subj} The evening star] is [_{pred} the morning star].

b) It's [_{subj} the evening star] that is the morning star.

c) * It's [_{pred} the morning star] that the evening star is.

In equational sentences the predicate DP cannot be clefted; only the subject DP (i.e., the argument DP) can be clefted.

Rapoport (1987) tests for the property-denoting characteristics of nominals. Given the examples above where both DPs are equally referential, the predicate DP is not property denoting. This should be reflected in tests for property denoting characteristics of predicate DPs. Using Rapoport's *though* preposing test on the predicate DPs in (19.b), we see that this is indeed the case. Both of the sentences in (22) are both bad, i.e., neither DP as a preposed predicate can be property denoting.

(22.a) *My sister though my daughter is, I love her.

b) *My daughter though my sister is, I love her.

In examples in (20) to (22), there is no asymmetry between the two nominal constituents in each set, i.e., both have the same referential properties.

4.1.2 Nêhiyawêwin Nominal Clauses

Now we will consider Nêhiyawêwin nominal clauses. But first, we look at the types of nominal constituents in Nêhiyawêwin and classify them according their characteristic

features. This occurs in Section 4.1.2.1. In Section 4.1.2.2, we look at the behaviour of deictic DPs in simple nominal clauses. Deictic DPs universally have a special status insofar as they are the most referential DPs. Therefore, deictic DPs in Nêhiyawêwin only occur as the subject in nominal structures while non-deictic DPs may occupy either subject or predicate position. We will then consider more complex examples involving clefted NPs and a relative clause. These may involve clefted NPs in Focussed NP constructions; and clefted wh-words in wh-questions. These discussions are in Section 4.1.2.3.

Then we will look at the agreement between subject and predicate in nominal structures and provide an analysis for the evidence.

4.1.2.1 Classifying Nominal Constituents

Nêhiyawêwin does not have obligatory determiners. There is no distinction between definite and indefinite DPs. The only determiners available are a set of deictic determiners shown in (23). Deictic determiners point to a specific individual and include information for three degrees of distance, proximate vs. obviative, gender (animate (3) vs. inanimate (O)), and number.

(23) **Demonstratives** (Wolfart 1973:33):

	<u>This</u>	<u>that</u>	<u>that yonder</u>
3	awa	ana	naha
3p	ôki	aniki	nêki
3'	ôhi	anihi	nêhi
0	ôma ⁶	anima	nêma
0p	ôhi	anihi	nêhi

⁶ *ôma* 'this' is also the default or unmarked determiner used often in conjunction with animate as well as inanimate nominals (cf. Ahenakew 1987.b).

Before we can begin our discussion of nominal clauses, we must consider the types of nominal constituents available in Nêhiyawêwin and rank them. The table in (24) contains the nominals (overt and non-overt) which are commonly found in the language and groups them according to their patterns of interaction.

(24) **Nominal Constituents**

a) Indef: [+Quant] [-wh] [+Quant] [+wh]	awîyak 'somebody' awîna 'who'	indefinite pronoun wh-word
b) Descriptors and Names:	iskwêw 'woman' John niya 'I, me' ni-simis 'my sibling' êko 'the very one' (previous mentioned)	bare noun ⁷ proper name personal pron.) possessive phrase pronoun (discourse)
c) Deictics and <i>pro</i> : [-deictic] [+deictic]	[_{DP} \emptyset <i>pro</i>] ana nâpêw 'that man' ana <i>pro</i> 'that one'	null DP DP DP

The Indefinite [+Quant] category in (a) is the least referential and includes wh-words and indefinites like 'somebody, something'.⁸ We will see that [+wh] indefinites are always (nominal) predicates in the context of nominal clauses.

Descriptors and Names in (b) are more referential than indefinites and less referential than deictic DPs and *pro*. In the absence of non-deictic determiners, the bare nouns are

⁷ Bare nouns can have either a definite or indefinite interpretation depending on the context (the parameters have yet to be determined).

⁸ Truly Quantified NPs like *kahkiyaw nâpêw* 'every man' are not discussed here though they are certainly part of the inventory.

unmarked with respect to NP vs. DP status (and definiteness) and must be classified by other means. This is an area which requires future study.

- (i) Overt pronominals referring to the speech participants, *niya* 'I' and *kiya* 'you' are usually considered to be definite.⁹ These pronominal forms serve a predominantly emphatic function. They never occur as arguments of a verb -- though they may occur (as subjects or predicates) in nominal clause structures. In either capacity they have DP status because they require a discourse referent.
- (ii) The other members of this set include names, possessive DPs, and the *êko* set of pronominals¹⁰. These are referential and/or definite and have DP status.
- (iii) According to the analysis in Longobardi (1994), common nouns such as *iskwêw* 'woman' denote a kind of entity, animate or inanimate. In a discourse context Nêhiyawêwin NPs may get definite or indefinite interpretation. In a verbal clause they are licensed by *pro* in argument position. However, we will see that a lexical noun may occur in subject position of a nominal clause. In the context of an elicited nominal clause, a deictic determiner is typically

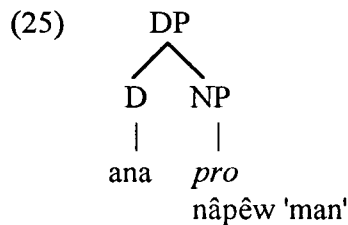
⁹ Third-person *wiya* 's/he' does not have the same occurrence patterns as the 1/2 pronouns and its use appears to be restricted to the function of an intensifier (Blain 1994). The *êko* set fills this gap in the paradigm.

¹⁰ This pronoun belongs to the following set which specify a (previously mentioned) person/thing in the discourse:

3 prox sg., 0 sg.	--	êwakoor êko
3 prox pl.,	--	êkonik
3 obv, 0 pl.	--	êkoni

provided by Nêhiyawêwin speakers for the subject nominal in a nominal clause environment.¹¹

The most referential category in the table in (24) is (c), which involves deictics and *pro*. A deictic DP may have an overt NP or an empty category, *pro* as illustrated in (25).¹² Deictics and *pro* are distinguished by the fact that they cannot function as the predicate in a nominal clause.



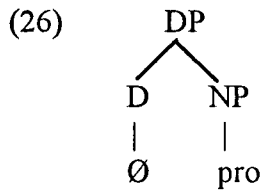
When teamed with an overt determiner, *pro* has the interpretation '(this/that) one' rather than the normal 's/he', 'him', 'them', etc.

Empty pronominal *pro* as an argument in A-position of a verb has [+definite] status.

As an argument in subject position of a nominal clause, *pro* (without an overt deictic determiner) is analysed as having a null determiner as shown in (26).

¹¹ If there is no deictic, then as the subject of a nominal clause these NPs would require a null determiner. We will see below that this rarely (if ever) happens and a deictic determiner is typically inserted by the speaker in these situations even if the sentence has not been elicited with a deictic. More research is required to determine whether a referential (DP) interpretation is really possible with these NPs.

¹² In other words, I do not see these demonstratives as proforms in and of themselves. They require a nominal constituent, empty or overt, to modify. Baker (1996) claims that, in discontinuous DPs, the demonstrative and the nominal are both coindexed with the *pro* in argument position. In my analysis, the lexical NP (with or without a deictic determiner) is coindexed with *pro* in A-position. The demonstrative (+ *pro*) is an independent DP which must be licensed in some other manner. A perusal of narratives suggests that nominal clauses are a common occurrence (cf. Déchaine (to appear)). In other words, these deictic DPs may often occur in nominal clauses with other nominal constituents.



The examples in (27) illustrate the DP structures in (25): the (bolded) constituent *ana* *nâpêw* 'that man' in (a) is a full DP, and *ana* 'that (animate/proximate) one' in (b) is a DP without an overt NP.

(27.a) **ana** *nâpêw* ê-wâpam-â-t Mary-wa
 that man conj-see-dir-3 Mary-obv
 That man saw Mary.

b) iyikohk ê-itahtopiponê-t **ana**, kisêyiniw ana, ...
 as much conj-be so old¹³ -3 that (one), old man that (one),..
 "As old as that old man was, ..." (Ahenakew 1987a:104)
 Literally: As old as **that one** was, that's the old man,...

The more complex (b) example is from a text and requires some explication. The deictic *ana* 'that (one)' in the first clause (preceding the comma) constitutes the DP *ana (pro)* 'that one'. After the comma, there is a nominal clause *kisêyiniw ana*, for which I provide the literal translation, 'that is the old man'. (We will see below that nominal clauses in Nêhiyawêwin are predicate initial.)

4.1.2.2 Subject and Predicate Ordering

According to Heggie's (1988) hierarchy, deictic DPs in English are strongly referential; and as a result, these DPs may only occur as subject in the canonical ordering of copular sentences.

We will look at the corresponding Nêhiyawêwin structures with respect to the three

¹³ literally: *itahto-piponê*- 'be so many winters'

categories in (24): (a) Indefinites, (b) Descriptors and Names, and (c) Deictics and *pro*. We must first establish the canonical ordering for subject and predicate; and then we will contrast members of all the various subcategories. The following hierarchy is adapted for the predicate-subject ordering in Nêhiyawêwin and shows the three categories we will be discussing.

(28) Nêhiyawêwin Hierarchy of reference:

indefinites <-- Descriptors & Names <-- Deictics and *pro*

[predicate]	←—————→	[subject]
less referential		more referential

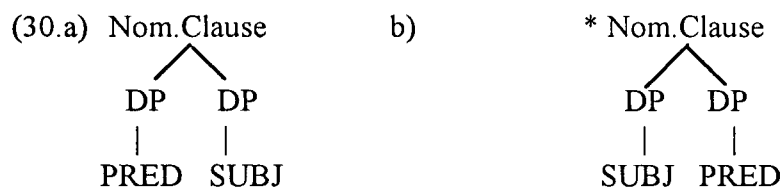
The first pair of examples involves a deictic DP (which is more referential than any other nominal constituent) and illustrates the predicate-initial ordering of Nêhiyawêwin nominal clauses. (29) involves the ordering of the deictic *ana* 'that' and a possessive phrase which is a member of the Descriptors and Names category. We see that these two constituents may constitute a single DP, as in (a), or a nominal clause structure with two DPs, as in (b), depending on their ordering. With the ordering in (a), the deictic is the determiner of a DP introducing *nisimis*. The nominal clause reading is not available, as indicated, and this example requires a verb in order to complete the sentence. When the order is reversed, as in (b), it constitutes a nominal clause. Observe in example (29.b) that there is no copula in Nêhiyawêwin nominal clauses.

- (29.a) *ana ni-sîmis* Vb.....
 that 1-younger sibling
 That younger sibling of mine..... D.182.b
 ≠My younger sibling is that one.

- b) ni-sîmis ana
 1-younger sibling that
 That (one) is my younger sibling. D.182.a

The descriptive nominal *nisîmis* 'my younger sibling' precedes the more referential deictic DP subject *ana (pro)* 'that one'. Given that the order in a nominal clause is not reversible (as illustrated in (a)), I propose that this example constitutes a predicative (asymmetric) nominal clause structure with the first nominal constituent as the predicate. Furthermore, this example establishes the predicate-initial ordering of nominal clauses in Nêhiyawêwin.

The nominal clause examples with deictic DP subject show that the predicate-subject ordering as shown in (30.a) is licit while subject-predicate ordering as in (b) is not.



In other words, the predicate is clause initial in a nominal clause.

4.1.2.3 Three Paradigms

We have established that nominal clauses are predicate-initial; now we will provide examples for three paradigms of nominal contrasts, namely:

- | | | | |
|------|---------------------|---|---------------------|
| I. | [+wh] Indefinite | - | Descriptors & Names |
| II. | [+wh] Indefinite | - | Deictics and pro |
| III. | Descriptors & Names | - | Deictics and pro |

We will also look briefly (in Section 4.1.2.3.4) at a fourth set, i.e., Descriptor - Descriptor.

We will see that, when both NPs are Descriptors without a discourse context -- or when the sentence has tense/aspect, one of the DPs typically is verbalized.

4.1.2.3.1 Paradigm I: [+wh] Indefinite - Descriptors & Names

In this section, we discuss the properties of the various descriptors which occur as subject of the nominal clause. Equating them with an indefinite provides insights into their referential properties. The examples involve a name in (31), a personal pronoun in (32), *êko* 'the very one' in (33), a possessor phrase in (34), and a bare noun in (35).

In a nominal clause which is elicited with a non-deictic NP (subject) and equated with an indefinite like *awîna* 'who', a deictic determiner is often introduced (i.e., *ana Mary* 'that Mary') in the subject of the Nêhiyawêwin sentence. This suggests that non-deictic Descriptors and Names (especially those without a discourse context) do not have referential DP status in their bare form. The following example involves a name and was presented with the interjected *ana* 'that' as shown. The reverse ordering in (b) is ungrammatical.

- | | |
|---|---|
| <p>(31.a) [_{pred} <i>awîna</i>] [_{subj} <i>ana Mary</i>]
 who that Mary
 Who is 'Mary'? cf.D.292</p> | <p>b) *<i>ana Mary awîna</i>
 that Mary who
 That 'Mary' is who? cf.D.292</p> |
|---|---|

In (32.a -b) a default all-purpose *ôma* 'this (inan)' occurs optionally with the 2-person subject. As shown in (c), the reverse word order is not grammatical; the wh-predicate must be clause initial.

- (32.a) *awîna (ôma) kiya*
 who (this) you
 Who are you? D.22

b) [_{pred} awîna] [_{subj} kiya]
 who you

Who are you?

B.433

c) *kiya awîna
 you who

Who are you?

B.433

The 2nd-person speech participant is referential enough to occur (albeit optionally) in the bare form. In (33.a), *êko* 'the very one' the third-person counterpart of 1st- and 2nd-person pronouns, also has referential status.¹⁴ By definition, this pronominal refers to some person in the discourse; hence its ability to refer. The reverse ordering in (b) is not licit.

(33.a) [_{pred} awîna] [_{subj} êko]
 who the very one

Who is he (i.e., the one we were talking about)? B.399.b

b) *êko awîna
 the very one who

Who is he (i.e., the one we were talking about)? B.399.b

Deictic DPs never occur with discourse dependent *êko* 'the very one'.

Possessor phrases have referential status via the possessor, who must refer either directly or via a referent in the discourse. However, a deictic is optionally inserted with a possessor phrase -- in this case, the default *ôma* 'this one'. The order shown in (b) is not good.

(34.a) awîna (ôma) ki-sîmis
 who this 2-younger sibling
 Who is your younger sibling?

cf.MA.467

b) *(ôma) ki-sîmis awîna
 this 2-younger sibling who
 Who is your younger sibling ?

¹⁴ Third-person *wiya* serves other functions in the syntax, as suggested above.

Regular non-referring lexical NPs are always translated with a deictic determiner such as *ana* 'that' as in (35.a). The reverse ordering in (35.b) is not grammatical.¹⁵

- (35.a) [pred awîna] [subj ana iskwêw]
 who that woman
 Who is the woman? MA.457
- b) *ana iskwêw awîna
 that woman who
 Who is the woman?

Alternatively (i.e., in a context which precludes a deictic DP), a non-referring non-deictic NP may be realized as a verb with verbal morphology.

- (36) awîna ôta ê-okimâhkân-iwi-t
 who here conj-chief-**vb**-3
 Who is the chief here? MA.350.b

The above evidence shows that, without a discourse context, there is the option if not a preference for a deictic determiner to cooccur with nominals in the Descriptors and Names category when they occur in argument (subject) position of a nominal clause. In the case of common nouns, it appears that the deictic is obligatory in this environment.¹⁶

4.1.2.3.2 Paradigm II: [+wh] Indefinite - Deictics and pro

The examples in (37) and (38) involve an elicited deictic DP (*vis a vis* examples in the previous section where the deictic was not elicited as such). The example in (37.a) involves

¹⁵ The example in (i) involves the inanimate wh-word *kîkwây* 'what', illustrating that the same type of structures apply to the inanimate wh-word. The (obligatory) inanimate deictic *ôma* 'this' is inserted as subject followed by a pause (comma), and the questioned word is in apposition. In Section 4.1.3 and in Chapter 5, I discuss the issue of agreement between subject and predicate and my analysis will show the appositional NP adjoined to IP.

(i) [pred kîkwây] [subj ôma], "iskwêw"
 what this, "woman"
 What is an "iskwêw"?

¹⁶ This argues for the non-argument status of (at least this group of) overt lexical NPs.

a regular lexical DP. Example (37.b) shows that the reverse ordering is not grammatical.

The examples in (38) do not have an overt NP.

- | | |
|--|---|
| <p>(37.a) [_{pred} awîna] [_{subj} ana nâpêw]
 who that man
 Who is that man? MA.452</p> | <p>b) *ana nâpêw awîna
 that man who
 Who is that man? MA.452</p> |
| <p>(38.a) [_{pred} awîna] [_{subj} ana]
 who that (one)
 Who is that one? B.399</p> | <p>b) *ana awîna
 that who
 Who is that one? cf.B.399</p> |

The wh-phrase in (39) is a bare wh-predicate. Every predicate must have a subject (as the the gloss illustrates); accordingly, the subject must be *pro*.

- (39) [_{pred} awîna] [_{subj} *pro*]
 who
 Who is it/he? B.527

4.1.2.3.3 Paradigm III: Descriptors & Names - Deictic DP

In this paradigm, one of the nominals is from the set of Descriptors & Names while the other, the subject DP, contains a deictic determiner. In the first sub-set, the deictic DP contains a non-overt nominal. In the next sub-set, the deictic DP contains an overt nominal.

4.1.2.3.3.1 Deictic DP (Non-overt Nominal)

The first example has a proper name as predicate and (as it happens) comes in the form of a yes/no question with the Q-particle *ci* inserted in second position between the two nominals. Again, the reverse ordering with a clause-initial deictic DP is not grammatical:

- | | |
|--|---|
| <p>(40.a) [_{pred} Bill] ci [_{subj} ana <i>pro</i>]
 Bill Q that (one)
 Is that Bill? LET.6</p> | <p>b) * ana ci Bill
 that Q Bill
 Is that Bill?</p> |
|--|---|

The next example involves a personal pronoun as predicate. The sentence was not elicited in this manner (i.e., with the appositional DP), but the Nêhiyawêwin translation was presented as in (a). In example (a), the subject is *ana* 'that (one)' in the segment preceding the comma, which is literally: '*mine/my one that one*'. This is followed by the DP '*that dog*' in apposition. Observe that the deictic DP is always the second nominal (subject) in the nominal clause, i.e., the ordering in (b) is not licit:

- (41.a) [_{pred} niya] [_{subj} ana *pro*], ana atim b) * ana niya , ana atim
 mine that (one), that dog that mine , that dog
 That's my dog. J.16 That's my dog. cf.J.16

The next set contains the pronominal *êko/êwako* 'the very one' as the predicate. The deictic cannot be in predicate position as shown in (b).

- (42.a) êwako ôma b) * ôma êwako
 the very one this (one) this (one) the very one
 This is the one. This is it! D.246.a This is the one. This is it!

The predicate is a possessive DP in the following set:

- (43.a) [_{pred} ni-atim] [_{subj} ana *pro*] b) * ana ni-atim
 1.Poss-dog that (one) that 1.Poss-dog
 That's my dog. MA.477 That's my dog.

It is more difficult to get a bare noun as predicate in an elicited example. Ahenakew (1987b:153) provides the following example with a bare noun as predicate; the reverse ordering in (b) provides a deictic DP rather than a nominal clause.

- (44.a) [_{pred} môhkomân] [_{subj} ôma] b) ôma môhkomân
 knife this this knife
 This is a knife. This knife.....
 ≠This knife.... ≠This is a knife.

According to Mary Ann (R.M. Déchaine, p.c.), this type of example requires a show-and-tell situation. Out-of-the-blue elicitations do not appear to provide the referential context required; thus, they are more difficult to obtain. Another example from a text supports this claim. In (c) (Ahenakew 1987a:104), the bolded nominal clause has a bare noun *kisêyiniw* 'old man' in predicate position. Given the context of the story, the predicate DP has a referential reading.

- c) iyikohk ê-itahtopiponê-t ana, **kisêyiniw ana, ...**
 as much conj-be so old-3 that (one), old man that (one),..
 "As old as that old man was, ..." (Ahenakew 1987a:104)
 Literally: As old as that one was, **that's the old man,**...

4.1.2.3.3.2 Deictic DP (Overt Nominal)

This category, with an overt lexical DP as subject, does not contain a full range of examples due to gaps in the data available. The example in (45) involves a name as the predicate DP while in (46) the predicate is a personal pronoun. In both cases, the deictic DP is restricted to subject position.

- (45) [pred John] [subj awa okimâhkân]
 John this chief
 John is chief. MA.54
 Literally: This chief is John.
- (46.a) [pred niya] [subj awa okimâw] b) * awa okimâw niya
 I this chief/boss this chief/boss I
 I'm the chief. cf.MA.352 I'm the chief.

The English glosses are the sentences which were elicited. In (45), *John* is the subject of the English sentence. In the Nêhiyawêwin translation, the surface ordering is maintained; however, *John* is the predicate DP.

The sentence in (47) has three DPs -- the pronominal *êko* 'the very one', the DP *ana nâpêw* 'that man', and *Bill* -- in the Nêhiyawêwin translation of an English sentence involving two DPs. I propose (see analysis in Section 4.1.3.3) that the third NP is adjoined to IP in the nominal clause structure, in apposition to the subject DP. Again, the reverse ordering with the deictic DP as predicate is impossible, as shown in (b).

(47.a) [_{pred} êko] [_{subj} ana nâpêw] , Bill
 the very one that man Bill
 That man is Bill. LET.4
 Literally: That man is him, Bill.

b) * [_{pred} ana nâpêw] [_{subj} êko] , Bill
 that man the very one Bill
 Bill is that man. LET.4

In all the Paradigm III examples above, there is an elicited deictic DP in subject position together with another nominal (descriptor or name) as predicate. In the following section, we will look at what happens when both of the nominal constituents are elicited as a descriptor or name.

4.1.2.3.4 Descriptor - Descriptor

In Section 4.1.2.3.3 above, we saw evidence in examples in (44) that bare nouns require a discourse context in order to occur as a nominal predicate. In elicited sentences, this discourse context is missing and this is reflected in the examples below.

This is seen again in

(48) where the bare NP predicate in (a) is problematic in this elicited sentence -- Mary Ann preferred the version in (b) with a verbalized form for elicited DP, *the chief*:

(48.a) ??[_{pred} okimâhkan] [_{subj} awa ni-mis]
 chief this 1.Poss-sister
 The chief is my sister. MA.348
 Literally: This sister of mine is chief

b) [ê-okimâ-wi-t] awa ni-mis
 conj-chief-vb-3 this 1.Poss-sister
 The chief is my sister. MA.348
 Literally: She is chief, this sister of mine.

Not only is the deictic DP always in subject position, but the subject in these examples -- including names and possessive DPs -- almost invariably occurs with a deictic determiner in elicited sentences. The question arises: Is this due to the fact that, in nominal clauses, the overt lexical NP can occur in subject position (i.e., in argument position) as opposed to verbal clauses, which have *pro* in A-positions?¹⁷

Other examples include (49) in which both nominals were elicited as lexical DPs with the indefinite DP being the predicate, i.e., *the chief is a woman*. The elicited English predicate in (a) is verbalized while the other DP becomes the predicate of a separate nominal clause, as indicated in the literal translation. Reversing the deictic and the bare nominal, as in (b), creates a deictic DP structure with the translation as shown.

(49.a) okimâhkan ana ê-iskwêw-i-t
 chief that conj-woman-vb-3
 The chief is a woman. MA.345.b
 Literally: That one is the chief & she is a woman.

b) ana okimâhkan ê-iskwêw-i-t
 that chief conj-woman-vb-3
 That chief is a woman
 ≠That one is the chief &

¹⁷ The absence of determiners in Nêhiyawêwin and the semantics of NPs is an area which requires study (cf. Matthewson 1996 on Salish, for example).

The nominal clause gloss (i.e., ‘that one is the chief’) for the first two constituents in (b) is not grammatical. The evidence suggests that if both nominal expressions are property denoting, then one must be verbalized.

Another situation which requires a verb rather than a lexical DP involves a sentence with tense or aspect. There is no overt aspect in (50.a), *John is chief*, and the sentence has a nominal clause structure with a deictic DP as subject. With overt aspect as in (50.b), *John used to be chief*, the second NP *chief* is derived as a verb. *John* is the predicate in a sentence-initial nominal clause structure with *awa (pro)* ‘this (one)’ as subject DP -- resulting in a biclausal sentence which is illustrated in (c) with a literal translation as shown.¹⁸

(50.a) [_{pred} John] [_{subj} awa okimâhkân]
 John this chief
 John is chief. MA.54

b) John êsa awa ê-kî-okimâhkân-i-t
 John I understand this conj-perf-chief-vb-3
 John used to be chief. MA.55

c) [_{CP} John êsa awa *pro*] & [_{CP} ê-kî-okimâhkân-i-t]
 Literally: John , I understand, is this one & he used to be chief.

4.1.2.4 Summary

We have seen that nominal clauses are predicate-initial in Nêhiyawêwin. We have also seen that predicate-subject asymmetries in Nêhiyawêwin reveal a referential hierarchy similar to that for English (Heggie 1988). In this hierarchy, deictic DPs are the most referential and indefinites, including wh-words, are the least referential. Within that context, wh-words are

¹⁸ Particles like *êsa* ‘I understand’ are often inserted in Nêhiyawêwin sentences including nominal clauses. They are assumed to be adjoined to IP and do not affect the analysis.

always in predicate position and deictic DPs and *pro* are always in subject position of a nominal clause structure. These asymmetries are captured in the Table in (51). I have also indicated with respect to the set in (I) the relative tendencies to insert a deictic determiner with the Descriptor/Name in subject position.

(51)

NP ₁ = PRED			NP ₂ = SUBJ		
I: wh-Indef - Desc/Name		* Desc/Name wh-word	wh-word Desc/Name deictic name deictic noun (deictic) pronoun (deictic) poss. phrase ---- êko		
II: wh-Indef - Deictic/ <i>pro</i>		* Desc/Name wh-word	wh-word Desc/Name		
III: Desc/Name - Deictic DP <i>pro</i>		* Deictic DP/ <i>pro</i> Desc/Name	Desc/Name Deictic DP/ <i>pro</i>		
Desc - Desc (- context)		Desc + verbalizer	deictic Desc.		
(+ context)		Desc.	deictic Desc.		

Within the Descriptors & Names category of (see list in (24)), all the constituents, except for bare nouns, may occupy either subject or predicate position. This implies that these constituents should be interchangeable when they come together in a nominal clause situation. In the case of bare nouns, however, they are also restricted in their use as predicates unless they have a discourse context. On the other hand, they -- like any other

descriptor and/or name -- always require a deictic determiner when in subject position. It has also been observed that the strong evidence for deictic determiners with subject DPs may be due to the fact that, in nominal clauses, overt DPs are allowed in argument position.

4.1.3. Agreement and Structure in Nominal Clauses

In Section 4.1.2, we looked at sentences involving two lexical NPs -- especially those involving regular nouns; and we observed the tendency to derive a property-denoting NP as a verbal predicate rather than a nominal one. In particular, clauses marked for tense or aspect require a verbal predicate to register this temporal agreement together with person agreement for the arguments involved.¹⁹ Nêhiyawêwin nominal clauses, as noted above, do not have a copula to register this agreement; therefore, verbal morphology is required on the verb.

We have seen, in (1) above, that Nêhiyawêwin nominal clauses in focussed NP structures frequently involve *êko* 'the very one (previously mentioned)' and another nominal. (1) is repeated here as (52). The ordering of nominals is reversible as shown in (52.a) and (52.b).

(52.a) [_{pred} John] [_{subj} êko] [_{CP} kê-nikamô-t]
 John the very one rel-sing-3
 It was John that sang. B.222

b) [_{pred} êko] [_{subj} John] [_{CP} kê-nikamô-t]
 the very one John rel-sing-3
 It was John that sang.

¹⁹ In the process, the ordering possibilities are more free, i.e., rather than obligatory clause-initial predicate, the ordering of verb and adjoined NPs is more flexible.

In both structures, the initial DP is the predicate while the second DP is in subject position.

There is only one third-person involved in this sentence, i.e., *John*, and the NP is proximate.

In the nominal clause, both the subject and the predicate are proximate.²⁰

The following examples show a possible variation within the nominal clause of focus constructions. In (53), there are two third-persons: *John* is proximate, and the focussed NP *Mary-wa* is obviative. The predicate *êkoni* 'the very one (obv)' in (53.a) agrees with the obviative status of the subject of the nominal clause, *Mary-wa*. Note also that *êkoni* and *Mary-wa* are interchangeable as shown in (b).

(53.a) [_{pred} êkoni] [_{subj} Mary-wa] [_{CP} kê-wâpam-â-t John]
 the very one(obv) Mary-obv rel-see-dir-3 John
 It was Mary that John saw. cf.B.343

b) [_{pred} Mary-wa] [_{subj} êkoni] [_{CP} kê-wâpam-â-t John]
 Mary-obv the very one(obv) rel-see-dir-3 John
 It was Mary that John saw. cf.B.343

Mary-wa is the antecedent for the obviative object *pro* in argument position of the verbal clause.

In this section (i.e., 4.1.3), we will look at the kind of agreement which occurs between the subject and predicate nominals both in regular nominal clauses and in nominal wh-clauses. I will then propose a structure for nominal clauses.

²⁰ The verbal clause with *kâ-* complementizer (and null-operator movement) is a relative clause. I will argue below that a relative clause can be hosted in the nominal clause in a position adjoined to IP.

4.1.3.1 Nominal Clause Agreement

We will look at four types of agreement in nominal clauses: agreement for number, gender, proximate/obviative, and person agreement. As noted above, we will include regular nominal clauses and nominal wh-clauses. We will compare briefly, in Section 4.1.3.1.5 the agreement possible with a verbal constituent.

4.1.3.1.1 Agreement for Number

In (54) and (55), we see that the subject and predicate in nominal clauses are marked for number. The (a) examples show singular (unmarked) agreement while the subject and predicate in the (b) examples are plural forms. The wh-examples are given in (55).

(54.a) êko [sub_j ana *pro*]
the very one that
That's him/the one we were speaking about.

b) êkonik [sub_j aniki *pro*]
the very ones those
That's them. J.887

(55.a) [pred awîna] [sub_j ana (pro)]
who (sg) that (one)
Who are that one? B.399

b) [pred awîniki] [sub_j aniki (pro)]
who (pl) those (ones)
Who are those guys? B.149

4.1.3.1.2 Agreement for Gender

There is no masculine/feminine gender distinction in Nêhiyawêwin; however, there is animate/inanimate “gender” distinction. The following examples illustrate that the subject

and predicate in nominal clauses agree for animacy. The NP in (56.a) is inanimate (with an inanimate deictic form) while (b) involves an animate NP with a corresponding animate deictic form:

(56.a) môhkomân [_{subj} ôma *pro*]
 knife this(inan)
 This is a knife. Ahenakew (1987b:153)

b) Bill ci [_{subj} awa *pro*]
 Bill Q this (anim)
 Is this Bill? cf.LET.6

The same contrast exists in wh-clauses; example (57.a) with *kîkwây* 'what' involves the inanimate wh-word while (b) with *awîna* 'who' represents animate gender.

(57.a) [_{pred} kîkwây] [_{subj} ôma]
 what this (inan)
 What is this? cf.MA.459

b) [_{pred} awîna] [_{subj} ana nâpêw]
 who that man
 Who is that man? MA.452

The number and gender agreement shown represent the typical features involved in subject-predicate agreement. The proximate/obviative agreement is a language specific feature.

4.1.3.1.3 Agreement for Proximate/Obviative

The examples in (58) involve possessor phrases with first- and third-person possessor in (a) and (b) respectively. The (first-person) possessed dog in (a) is proximate (unmarked); in (b), with a third-person possessor, the dog is marked for obviation. In each case, the deictic in subject position reflects this contrast.

(58.a) [_{pred} ni-atim] [_{subj} ana *pro*]
 1.Poss-dog that (one)
 That's my dog. MA.477

- b) [_{pred} o-têm-a] [_{subj} anihi *pro*]
 3.Poss-dog-obv that (one)
 That's his dog. cf.MA.477

The same contrast occurs in the wh-clauses in (59). With the second-person possessor in (a), the nominal *-sîmis* 'younger sibling' is proximate. With a third-person possessor, the possessed nominal would be obviative as shown in (b).

- (59.a) [_{pred} awîna] [_{subj} ki-sîmis]
 who your younger sibling
 Who is your sister? MA.455

- [_{pred} awîna] [_{subj} o-sîmis-a]
 who his-younger sibling-obv
 Who is his younger sister?

The examples in (60) show obviative agreement between subject and predicate. The obviative-marked nominal clause form in (a) does not typically occur by itself as shown, i.e., it would require a special context. In the full wh-question in (b), this context is provided. This example involves an obviative referent in the following clause. The [+AGR] wh-phrase is marked obviative accordingly.

- (60.a) [_{pred} awîni-wa] [_{subj} anihi]
 who-obv that (obv) one
 Who is that? M.A. 377.b

- b) [_{pred} awîni-wa] [_{subj} anihi [John kê-wî-wîkim-â-t]]
 who-obv that(obv) one John rel-fut-marry-dir-3
 Who is it that John is going to marry? D.261

4.1.3.1.4 No Agreement for Person

We have seen above that there is subject-predicate agreement in Nêhiyawêwin for number, animate/inanimate gender, and for proximate/obviative. On the other hand, there is never

person agreement between subject and predicate nominals in a nominal clause. This type of agreement is restricted to a verbal constituent. The absence of agreement is evidenced in the Nêhiyawêwin examples in (61), in contrast to the English glosses in which the copula has different forms for the first- and third-person subjects.

- (61.a) [_{pred} John] [_{subj} awa okimâhkân]
 John this chief
 John is chief. MA.54
 Literally: This chief is John.

- b) [_{pred} niya] [_{subj} awa okimâw]
 I this chief/boss
 I'm the chief. cf.MA.352

Similarly, the wh-phrase is not marked for person agreement as illustrated in (62).

The wh-word *awîna* 'who' pronominal has the same form with the third-person in (a) and the second-person in (b).

- (62.a) [_{pred} awîna] [_{subj} êko]
 who the very one
 Who is he? (the very one we mentioned) MA.458

- b) [_{pred} awîna] [_{subj} kiya]
 who you
 Who are you? B.433

The wh-word is always the standard pronominal form while the subject in (b) is second-person.

The subject-predicate agreement which occurs between nominals in a nominal clause is termed Predicational agreement. In the following subsection, predicational agreement is contrasted to verbal agreement.

4.1.3.1.5 Verbal Agreement

Verbal agreement is richer than predication agreement and may include all of the agreement categories listed. For example, consider the paradigms in Appendix A for Nêhiyawêwin. In (63), (a) illustrates the person agreement for first and third persons with the conjunct form of an intransitive (VIA) verb, *nikamo-* 'to sing'. The examples in (b) show number agreement with the third person singular and plural. (63.c) shows the contrast between 3-proximate agreement and 3'-obviative.

(63.a) Person:	ê-nikamo-yân	'I am singing'
	ê-nikamo-t	's/he is singing'
b) Number:	ê-nikamo-t	's/he is singing'
	ê-nikamo-t-ak	'they are singing'
c) Prox/obv:	ê-nikamo-t	's/he (prox) is singing'
	ê-nikamo-t-a	's/he (obv) is singing'

Note that gender (animate/inanimate) in Nêhiyawêwin generally determines the verb type (for example VTA vs. VTI) and this in turn selects different verb stems or different verb-final morphemes.

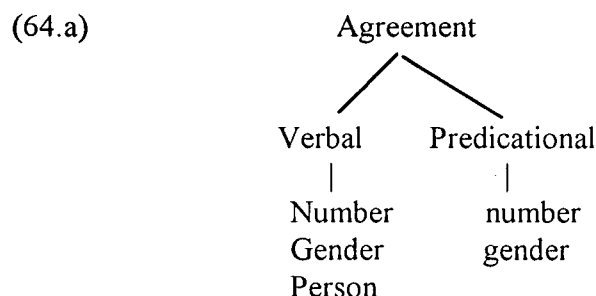
4.1.3.1.6 Three types of Agreement

Typically, temporal and aspectual properties are associated with states and events and are expressed in conjunction with a verbal predicate.²¹ In English, the copula in nominal clauses

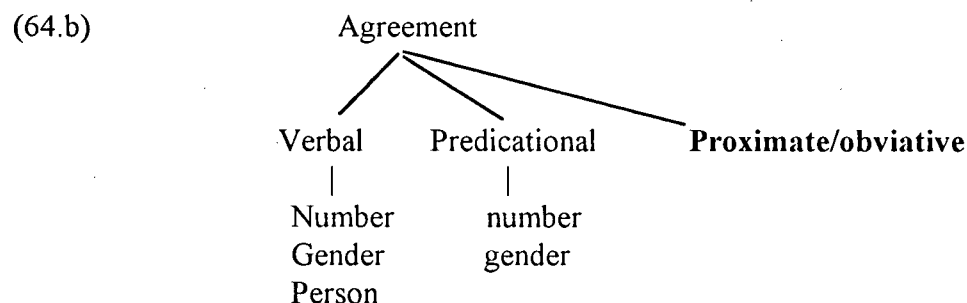
²¹ Evidence for tense-marking of nominals occurs in Coast Salish (cf. Burton 1996) signifying, for example, that a person is dead, i.e., my late grandfather. There is a similar morpheme in Ojibwa (Nichols 1980) and in Potowatomi (Hockett 1966). As noted in Wolfart (1973:31) this morpheme /epan/ no longer exists in Nêhiyawêwin.

-- as well as in some verbal paradigms -- functions as the verbal component to instantiate person agreement (and tense). In Nêhiyawêwin, there is no equivalent of a copula in nominal clauses; therefore, a tensed clause requires a verb (see (50) above).

Predicational agreement occurs on non-verbal lexical predicates, i.e., nouns and adjectives, and is typically restricted to number and gender agreement between a subject and predicate.²² This contrast is schematized in (64).

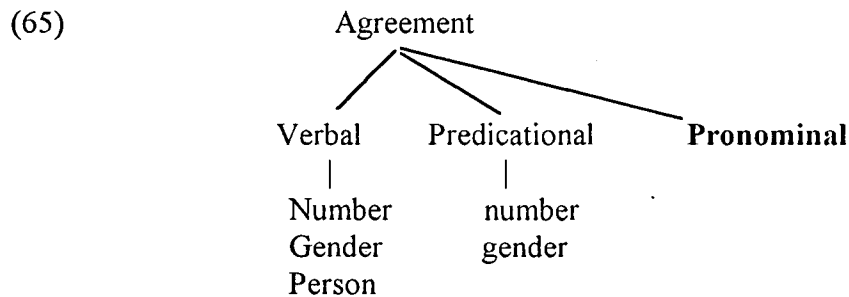


In Nêhiyawêwin, there is the added category of proximate/obviative marking which is not part of the usual paradigm for predicational marking. (Note that only obviative is marked with a suffix while proximate is unmarked or Ø-marked.) This third type of agreement, for proximate/obviative, is shown in (64.b).



²² This is also the type of agreement which occurs between nouns and their modifiers/adjectives and determiners within a DP. In Nêhiyawêwin, deictic determiners also agree with their NP for proximate/obviative status.

This three-way contrast with respect to agreement is not restricted to Nêhiyawêwin; similar contrasts are found in Semitic languages, for example, in Modern Hebrew (Rapaport 1987, Doron 1983, Déchaine 1993).



The Hebrew examples given in (66) (from Rapaport 1987) show three degrees of agreement. In (66.a), the two nominal constituents agree for number and gender. This is restricted to predicative sentences, i.e., where the predicate NP is property denoting. The pronominal agreement in (b) (the third-person pronoun marking number and gender) is optional in predicative sentences but obligatory in an equative nominal sentence with null tense. Nominal sentences with past or future tense require a verbal constituent (copula) as shown in (c).

- | | | |
|--------|---|---|
| (66.a) | Dani more ba-universita.
Dani teacher in-university
Dani [is] a teacher at the university. | Present tense
Number/gender agreement |
| b) | Dani hu more ba-universita.
Dani 3sm teacher in-university
Dani [is] a teacher at the university. | Present tense
Pronominal agreement
(number/gender) |
| c) | Dani haya more ba-universita.
Dani be.Pst teacher in-university
Dani was a teacher at the university. | Past tense
Verbal agreement |

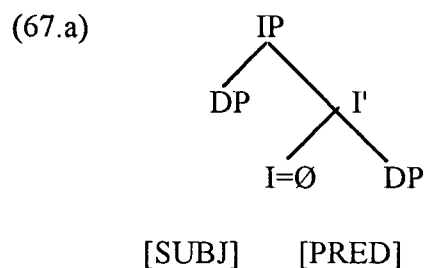
In Rapaport's (1987) analysis, the equative and verbal examples in (b) and (c) require an IP projection with the pronominal agreement morpheme occurring in Infl.

Nêhiyawêwin nominal clauses do not have a separate morpheme constituent in Infl containing agreement information. Gender is determined by the choice of wh-word, for example, *awîna* 'who' and *kîkwây* 'what' or by the choice of determiner from the deictic paradigm shown above in (23). Plural forms are marked on the nominals with *-ak* 'plural' suffix while singular is unmarked or Ø-marked.

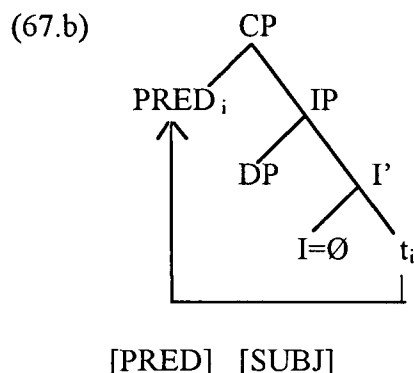
I propose an IP structure for nominal clauses in Nêhiyawêwin. The subject and predicate agree for gender and number (= predication agreement). In my analysis, proximate/obviative agreement is obtained by movement of the predicate nominal to Spec CP of the nominal clause. This also accounts for predicate-initial ordering in Nêhiyawêwin nominal clauses.

4.1.3.2 Nominal Clause Structures

In Chapter 1, I have adopted a basic head-initial spec-initial phrase structure for Nêhiyawêwin. This means that the basic IP structure of a nominal clause has the structure in (67.a). In this configuration, there is predication agreement. This accounts for the basic agreement between the subject and predicate DPs for gender and number.



In this structure, the subject (in Specifier position) precedes the predicate; however, it was observed above that nominal clauses are predicate-initial. I propose that this ordering is derived via predicate (XP) fronting to a position higher than IP, i.e., to Spec CP, as shown in (b) (cf. Dechaine (to appear)).



Unlike in Hebrew, there is no evidence for a distinction between predication nominal clauses and equational ones. In both cases the two nominals agree within the clause for proximate/obviative -- though the clause as a whole may be unmarked (i.e., morphologically proximate by default) while the argument to which it refers in a following clause is obviative.²³ This obligatory agreement does not appear to be significant with respect to the distinction between predicative and equative clauses, as evidenced in Hebrew. However, this is yet another area which requires further study.

4.1.3.3 Analysis of Nominal Clauses

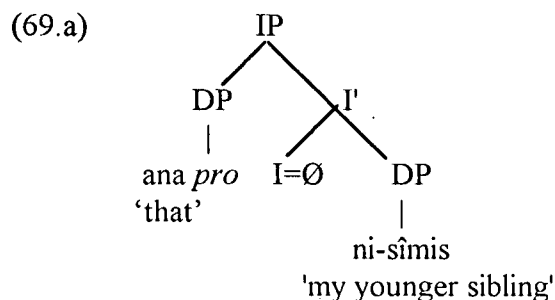
Given this analysis, we will look at a range of nominal clause examples and provide structures for them. The first set of examples is shown in (68).

²³ Proximate NPs are unmarked (which also constitutes the default form) while obviative NPs are marked by *-(w)a* suffix.

(68.a) ni-sîmis ana
 1-younger sibling that
 That is my younger sibling. D.182.a

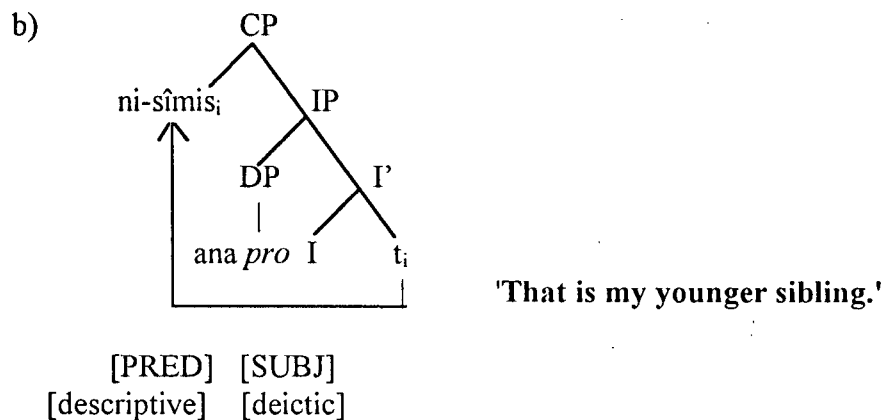
b) êko ana nâpêw Bill
 the very one that man Bill
 That man is Bill. LET.4

All of the examples have null tense, and the basic structure involves an IP projection as in (67.a). In (68.a) above, the predicate is proximate and the proximate form of the deictic is used -- both are the unmarked forms. Given these constituents, the underlying form of the sentence is represented as in (69.a), with the subject DP preceding the predicate.



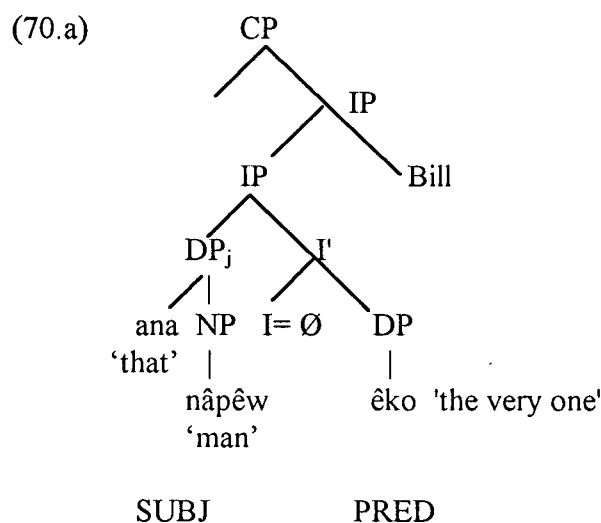
[SUBJ] [PRED]

The subject and predicate nominals agree inherently for the lexical features animate and singular. In my analysis, the predicate DP raises to Spec CP for proximate agreement, leaving a trace of the moved DP in the predicate position as shown in (b).



Clearly this movement analysis requires motivation. As noted above, nominals agree inherently for number and gender, i.e., predication agreement. However, Nêhiyawêwin nominals in nominal clauses also agree for proximate/obviative status. It is this non-inherent agreement which triggers predicate raising to Spec CP for Spec-head agreement. Hence the obligatory predicate-initial ordering in Nêhiyawêwin nominal clauses.

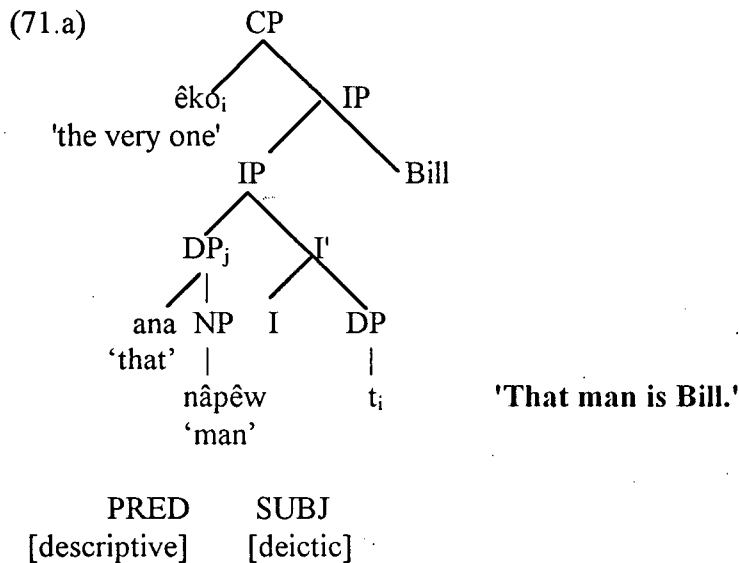
For example (68.b), I propose the structure in (70.a) where the third NP is adjoined to IP in the nominal clause structure:



This tree is represented in the bracketted structure in (b).

b) [CP [IP [IP [ana nâpêw]_{DP} [êko]_{DP}] Bill]]

In this example, the DP *Bill* is in apposition to *ana nâpêw* 'that man' subject of the nominal clause. Again, the predicate raises for proximate agreement with its subject in (71.a).



Deictic DPs are the most referential and must occur as the subject of a nominal clause. As we have seen above, the deictic DP is always in second position, i.e., Nêhiyawêwin nominal clauses are predicate initial. The movement shown in (71.b) accounts for this predicate-initial position. This tree is represented in the bracketed structure in (b).

b) [CP êko_i [IP [IP [ana nâpêw]_{DP} [t_i]_{DP}] Bill]]

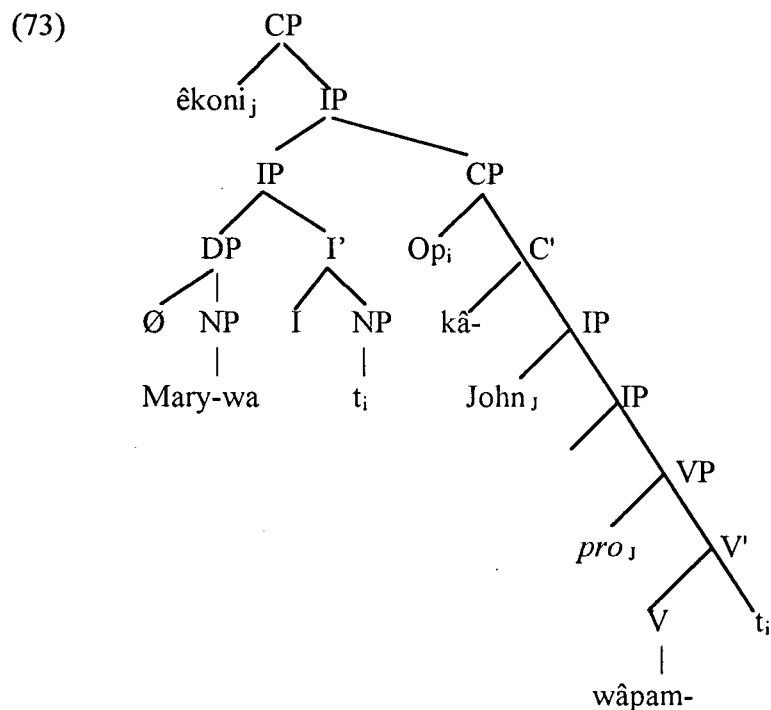
A more literal translation of the above would be: *'That man, Bill, is the very one (we were talking about)'* or, reflecting the Nêhiyawêwin predicate-initial ordering: *'The very one is that man, Bill.'*

The predicate in (72) shows obviative agreement between the subject and predicate DPs and a relative clause in apposition to the subject *Mary-wa*.

(72) êkoni [NP Mary-wa] [CP kâ-wâpam-â-t John]]
 the very one(obv) Mary-obv rel-see-dir-3 John
 It was Mary that John saw. cf.B.343

The same configuration accounts for the obviative agreement. I argue that the relative clause is IP-adjoined. The following diagram represents the output after predicate movement

in the nominal clause. The predicate *êkoni* 'that very one (obv)' shows agreement with the obviative status of the subject *Mary-wa*. In the IP-adjoined (headless) relative clause with *kâ-* complementizer, there is null-operator movement, as shown.



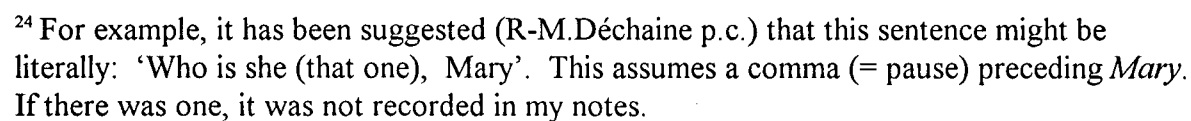
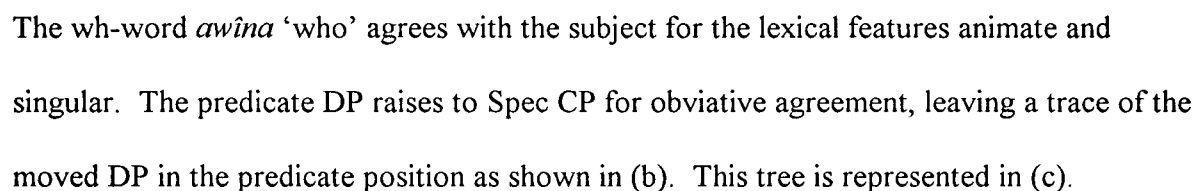
The same analysis accounts for *wh*-clauses. The examples in (74) involve proximate agreement in (a) and obviative agreement in (b) with a possessor phrase as subject. The possessor is 3-proximate, and the possessee is therefore obviative.

(74.a) *awîna ana Mary*
 who that Mary
 Who is 'Mary'? D.292

b) *awîni-wa anihi o-kâwiy-a*
 who-obv that 3.Poss-mother-obv
 Who is his mother?

I have suggested above that the determiner on subjects like *Mary* in (a) may be due to the fact that overt NPs are in argument (subject) position in nominal clauses; and as such,

Example (74.b) has a possessor phrase with a deictic determiner, as shown in the tree in (75.a). The possessor is 3-proximate, and the possessee is obviative. The *wh*-word shows agreement for the obviative subject.



c) [CP awîniwa; [IP [anihi okâwiya]_{DP} [t_i]_{DP}]]

4.1.4 Summary

I have argued that wh-words can never be part of a verbal clause; rather, they occur in nominal clause constructions.

In this chapter, I have looked at nominal clauses in both English and in Nêhiyawêwin.

In the course of the investigation, I have established that: (i) the ordering in Nêhiyawêwin nominal clauses is predicate initial; and (ii) that predicate-subject asymmetries in Nêhiyawêwin reveal a referential hierarchy similar to that of Heggie (1988). In this hierarchy, deictic DPs are the most referential and indefinites, including wh-words, are the least referential. Hence the wh-word is always in predicate position of the nominal clause.

Given the underlying Spec-initial (i.e., subject-initial) structure proposed in Chapter 1 for phrasal projections (XP), the predicate-initial ordering of nominal clauses presents a problem. This problem is addressed via (iii), the agreement properties of nominal clauses. Predicational agreement in nominal clauses without a verbal constituent (copula) is typically restricted to the inherent lexical properties of a noun, e.g., gender and number. However, we have seen that there is also proximate/obviative agreement between the subject and predicate in Nêhiyawêwin nominal clauses. This additional agreement feature (iv) forces predicate fronting -- accounting, not only for the agreement facts, but also for the predicate-initial ordering in Nêhiyawêwin. In conclusion, the sentence-initial wh-word arises via the more general operation of predicate fronting in all nominal clauses.

Chapter 5

CLEFTS AND CONJUNCTS

5.0 Introduction

In this chapter, I provide an analysis of Nêhiyawêwin wh-questions. This analysis will account for simple nominal wh-clause structures as in (1) and for bi-clausal questions as in (2). The nominal clause subject may be an overt deictic like *ana* 'that one' as in the (a) examples, or null *pro* as in the (b) examples. In the biclausal examples in (2), the complementizer in the verbal clause may be *kâ-* as in (a) or *ê-* as in (b).

- (1.a) [_{pred} awîna] [_{subj} ana *pro*]
 who that (one)
 Who is he? // Who is that (one)? B.399.a

- b) awîna [_{DP} *pro*]
 who
 Who is it/he?

- (2.a) [_{CP} awîna ana] [_{CP} kâ-sipwêhtê-t] b) [awîna [_{DP} *pro*]] [_{CP} ê-sipwêhtê-t]
 who that rel-leave-3 who conj-leave-3
 Who is it that left? Who left?

I have argued in Chapter 4 that the nominal-clause subject and predicate agree for number, gender (animate/inanimate) and for proximate/obviative status. In Section 5.1, we will look briefly at proximate/obviative agreement across clauses. In wh-questions of more than one clause, the wh-phrase is the antecedent for an argument (*pro*) in a following clause. (More specifically, the wh-phrase is the antecedent of the null operator-variable chain which results from the movement of *pro* (as null operator) to Spec CP of the verbal clause.) We

will see that the nominal clause subject and predicate -- although they must agree with each other -- may agree ([+AGR]) or not ([-AGR]) with the proximate/obviative status of a *pro* in argument position of the verb. This is discussed in Section 5.1.

The analysis for wh-questions with *kâ*- clauses is provided in Section 5.2.1 while the analysis for *ê*- clauses is provided in Section 5.2.2. This latter section also provides a preliminary discussion of null operator movement with *ê*- clauses.

5.1 Agreement Across Clauses

In Chapter 4, we saw that nominal clauses may host a third NP or a relative clause as an adjunct within the clause. The adjoined relative clause contains an operator-variable chain which is coindexed with the wh-antecedent. The first evidence we will look at involves agreement between the wh-phrase and the proximate/obviative status of the referent in the following clause. Obviative is the marked status and involves a suffix (*-hi* or *-(w)a*) on the wh-word realized as *awîni-hi* or *awîni-wa* 'who'. The obviation marking provides the only overt evidence for the presence or absence of [AGR]. Therefore, we will provide an analysis based on the obviative agreement, which can then be generalized to proximate (unmarked) agreement. We will look at two types of Wh-questions:

- (i) Wh-questions with *kâ*- clauses: *awîna* (ana) [*kâ*-...];
- (ii) Wh-questions with *ê*- clauses: *awîna* [*ê*- ...].

The first set involves a nominal clause with *kâ*- complementizer in the verbal clause. In this set, the nominal clause may have a deictic subject or a non-deictic subject. The deictic wh-

expression *awîna ana* 'who is that (one)' always takes *kâ-* complementizer in the verbal clause.¹ The wh-expression may agree ([+AGR]) or not ([-AGR]) with the proximate/obviative status of the referent in the verbal clause. In (3), the unmarked [-obv] wh-expression in the nominal clause has an obviative referent in object position of the adjoined clause. The

[-AGR] agreement facts are illustrated in (b).

- (3.a) **awîna ana** John *kâ-wî-wîkim-â-t* [-AGR]
 who that (one) John rel-fut-marry-dir-3 3 → 3'-wh
 Who is it that John is going to marry? D.263

- b) **awîna ana** [John_j ... pro_j ... marry...*pro*_[+obv]]
 [-obv] ——— [-AGR] ———

The bolded constituents constitute the nominal clause subject and predicate while the remainder of the sentence is the relative clause involving two third persons. The verb is direct with a 3-proximate subject and a 3'-obviative object. The proximate NP *John* is coindexed with the *pro* in subject position; therefore, it is the unidentified obviative object which is the referent of the wh-phrase. The wh-word and the determiner of the DP subject in the nominal clause -- although they agree with each other as subject and predicate -- are both unmarked for obviation and are therefore [-AGR] with respect to their referent in the verbal clause. I argue in Section 5.1.1 that the nominal clause hosts the relative clause via adjunction to IP.

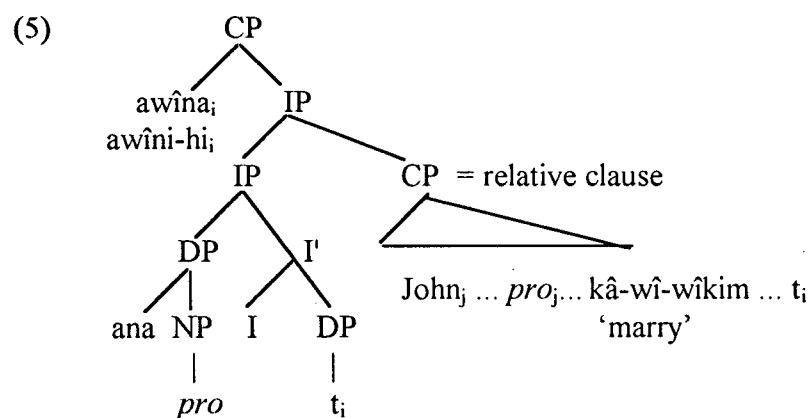
¹ One consultant insisted that an *ê-* clause is not grammatical; and another consultant, when presented with an example using *ê-*, hesitated and then simply stated her preference for *kâ-*. As noted above and as we will see in Chapter 6, this wh-phrase seems to have a focussing effect.

In example (4), the (bolded) nominal clause constituents are [+AGR] with the coreferent object of the verb.

- (4.a) **awîni-wa anihi** John kê-wî-wîkim-â-t [+AGR]
 who-obv that John rel-fut-marry-dir-3 3 → 3'-wh
 Who is it that John is going to marry? D.261

- b) awîna-wa anihi [John_j ... pro_j...marry...pro_i[+obv]]
 [+obv] — [+AGR] —

The verbal clause in (4) is identical to that in (3). The only difference is in the [+obv] features of the subject and predicate in the nominal wh-clause. In the nominal clause, the subject and predicate agree with each other for obviation; and together, they agree ([+AGR]) with the obviative referent of the verbal clause. In my analysis, the relative clause is adjoined to IP within the nominal clause in both (3) and (4), as represented in the structure in (5).²



The relative clause in (5) is shown with a *pro* head. In contrast with complement type *ê*- clauses, relative clauses (by virtue of the operator-variable chain) require an antecedent --

² This is essentially the structure attributed to Ojibwa wh-questions in Truitner and Dunnigan (1972).

specifically, an NP.³ In Section 5.2.1, I consider some of the issues involved and alternative adjunction sites for relative clauses.⁴

An overt determiner like *ana* 'that' is not obligatory in wh-questions, as illustrated in the examples in (6). In all the examples, the referent in the relative clause is obviative. In (a), the wh-word is [-AGR], the default/unmarked form (= proximate). The verb in the relative clause is direct with a proximate subject (coindexed with *John*) and an obviative object which is coreferent with the wh-expression. In contrast, the wh-word is [+AGR] in (b).

- | | | |
|-------|---|---------------------|
| (6.a) | awîna [John kê-ocêm-â-t]
who (obv) John rel-kiss-dir-3
Who did John kiss? | [-AGR]
3 → 3'-wh |
| b) | awîni-wa [John kê-ocêm-â-t]
who (obv) John rel-kiss-dir-3
Who did John kiss? | [+AGR]
3 → 3'-wh |

The examples in (7) are both [+AGR]. In (a), there is an NP *John* coindexed with the subject *pro* in the verbal clause. There is no lexical NP in (b); however, the wh-phrase is marked obviative and agrees only with the object *pro* in the verbal clause.

- | | | |
|-------|---|---------------------|
| (7.a) | awînihi [John kê-pakamahw-â-t]
who (obv) John rel-hit s.o.-dir-3
Who(obv) is it that John(prox) hit? cf. B.360.b | [+AGR]
3 → 3'-wh |
|-------|---|---------------------|

³ As discussed in Williamson (1987, and references therein), the head of a relative clause is indefinite -- the relative clause restricts the reference of the head and contributes the definite interpretation.

⁴ Whether or not all Nêhiyawêwin relative clauses are restrictive is an issue which must be addressed.

- b) **awînihi** [kâ-nîsokamow-â-t]⁵ [+AGR]
 who (obv) rel-help s.o.-dir-3 3 → 3'-wh
 Who is it that she is helping? B.338

As we have seen in Chapter 3, the verbal clause in a wh-question in Nêhiyawêwin is not always a relative clause with *kâ-* complementizer. Complementizer *ê-* may also be used in the verbal clause in wh-questions. The examples in (8) involve a non-deictic DP as subject of the nominal clause together with an *ê-* clause. These examples reveal the same [+/-AGR] contrast with *ê-* complementizer.

- (8.a) **awîna** ana nâpêw **ê-pâ-pakamahw-â-t** [-AGR]
 who that man (prox) conj-redup-hit-dir-3 3 → 3'-wh
 Who is that man hitting? cf.MA.158.b
 Literally: [Who is he_i] & [that man is hitting him_i]
- b) **awîni-hi** Mary **ê-wâ-wâpam-â-t** [+AGR]
 who (obv) Mary conj-redup-see s.o.-dir-3 3 → 3'-wh
 Who (obv) is Mary seeing (i.e., dating)? D.132
 Literally: [Who is he_i] & [Mary is seeing him_i]

The CP-adjoined *ê-* clause is interpreted in the literal translations as being conjoined to the nominal clause.

5.2 Analysis of Wh-questions

The section above has provided us with evidence for all possible combinations with respect to: i) the form of the wh-phrase; ii) the complementizer used; and iii) the [+/-AGR] features

⁵ The verb *-nîso-kamow-* was used by Bill to translate 'help' and is listed thus with the above spelling in Faries (1938:95). Literally, it breaks down: *nîso-k-amaw* ?-
 'two-? -benef'

possible between the wh-phrase and the referent in a following clause. In this section, I provide an analysis of the following categories of wh-questions.

In the table in (9), the wh-phrases in (I) are analyzed as clefted constructions and are characterized by the fact that the verbal clause has *kâ-* complementizer. Wh-phrases occurring with a deictic constituent in the subject DP occur obligatorily with *kâ-* complementizer, while in [-deictic] wh-phrases, *kâ-* complementizer is an option. Otherwise, the conjunctive examples in (II) occur with *ê-*complementizer. In both clefted and conjunctive situations, agreement of the nominal clause DPs may be [+AGR] or [-AGR] for the proximate/obviative status of the coreferring constituent in the verbal clause.

The two categories, clefts and conjuncts, are distinguished by the their adjunction site with respect to the nominal wh-clause. The clefted examples, as noted in (5) above, are adjoined to IP (Section 5.2.1). Conjuncts, as we will see (Section 5.2.2) are adjoined to CP.

(9) Clefts and Conjuncts

	Wh-phrase (+ deictic) (– deictic)	Complementizer	[AGR]
I: Clefts	awîna ana awînihi anihi awîniwa anihi	kâ-	[–/+AGR]
	awîna awînihi awîniwa	kâ-	[–/+AGR]
II: Conjuncts	awîna awînihi awîniwa	ê-	[–/+AGR]

It should be noted that not every speaker uses the entire range, but they all seem to be available and grammatical.⁶

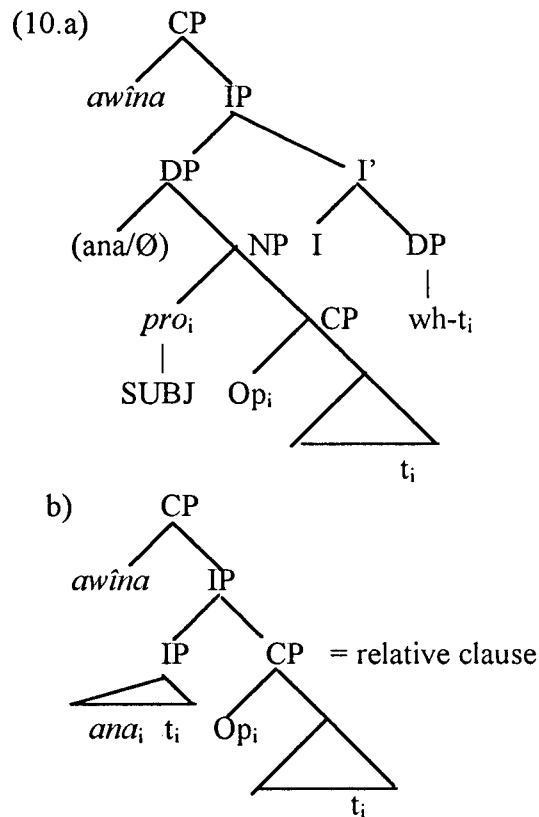
5.2.1 Wh-questions with *kâ-* clauses

In this section we look at wh-questions with *kâ-* complementizer.

⁶ In addition, wh-questions may also occur with the independent form of the verb. This category I have not fully researched, and I have, therefore, not included it above.

5.2.1.1 Adjunction Sites for *kâ*- clauses

There is operator movement in *kâ*- clauses at S-structure. The relative clause cannot stand alone as an independent clause; it must be hosted by the nominal clause -- either adjoined to the NP subject in the nominal clause as in (10.a) or adjoined to IP as in (b).



We have these two possible adjunction sites in the nominal clause for relative clauses.

We also have two possible patterns of [+AGR] and [-AGR]. Proximate/obviative agreement is not obligatory between the nominal clause constituents and the *pro* (*cum* null operator) in the relative clause. Given the above, we have two possible accounts in (11) for the [+/-AGR] facts:

(11.a) That [+/-AGR] reflects structural differences, i.e.:

[+AGR] = NP adjunction

[-AGR] = IP adjunction

b) That there is no structural correlation.

I argue for (b) on the basis of the following two arguments: (i) that \hat{e} -clauses show the same [+AGR] and [-AGR] facts -- and \hat{e} -clauses are uniformly CP adjoined to the nominal clause (see discussions in Section 5.2.2); and (ii) that, with a structural account as in (11.a), one would expect differences in interpretation. For example, with IP adjunction, the relative clause would be interpreted as an appositive structure while, with NP adjunction, the relative clause would have restrictive interpretation.

However, this is not the case; the interpretation is always that of a restrictive relative. There is no contrast in the interpretation between [+AGR] and [-AGR] examples in this respect; and there can be no correlation between the adjunction site and the restrictive/non-restrictive interpretation of relatives.

I therefore adopt the configuration in (10.b) which generalizes a uniform IP-adjunction site for all $k\hat{a}$ -clauses. I propose, further, that this constitutes a clefted structure. This [+/-AGR] configuration is illustrated in (12).

(12) $[_{CP} \text{awîna}_i [[_{IP} (\text{ana}) \text{pro}_i \text{t}_i] [_{IP} \text{pro} [_{CP} \text{Op}_i \text{John}_j \text{pro}_j \dots \text{hit} \dots \text{t}_i]]]$
 |____[+/-obv]_____| |____[+obv]_____|

The IP-adjunction site in (12) allows the independent proximate/obviative status of the subject nominal, i.e., the subject may be either [+AGR] or [-AGR].

5.2.1.2 Clefted Wh-phrase with *kâ*- Complementizer

Clefted wh-phrases occur with a deictic determiner in the subject DP ([+deictic]) or without a deictic determiner ([-deictic]). In the following set, the wh-phrase may be [-AGR] or [+AGR] in relation to the referent in the accompanying clause. The following examples are [+AGR] with an obviative referent in the following clause. Example (13.a) involves a deictic while (b) does not.

- (13.a) **awîni-wa anihi** [Op_i [John *kâ-wî-wîkim-â-t*]] [+AGR]
 who-obv that (one) John rel-fut-marry-dir-3 3 → 3'-wh
 Who is it that John will marry? D.261
 Literally: Who is that [Op_i [John will marry t_i]]
- b) **awînihi** [Op_i [*kâ-nîsokamow-â-t*]] [+AGR]
 who (obv) rel-help s.o.-dir-3 3 → 3'-wh
 Who is it that she is helping? B.338
 Literally: Who is it [Op_i [*pro* is helping t_i]]

By generalization from the obviative examples above, the examples in (14) are [+AGR] for the proximate (subject) argument in the verbal clause. (The unmarked status of proximate does not distinguish between marked and unmarked examples.) The (a) example involves a deictic while the (b) and (c) examples do not.

- (14.a) **awîna ana** [Op_i [*kâ-ocêm-â-t* John-a]] [+AGR]
 who that (one) rel-kiss-dir-3' John-obv 3-wh → 3'
 Who is it that kissed John? D.17
 Literally: Who is that [Op_i that [t_i kissed John]]
- b) **awîna** [Op_i [*kâ-wâpam-isk*]] [+AGR]
 who rel-see-dir-3>2 3-wh → 2
 Who is it that saw you? D.106
- c) **awîna** [Op_i [*kâ-pîkiskwât-it*]] [+AGR]
 who rel-speak to-3>1 3-wh → 1
 Who is talking to me? J.29

In the following examples with a deictic DP subject, the wh-phrase is [-AGR] with the obviative referent in the following verbal clause.

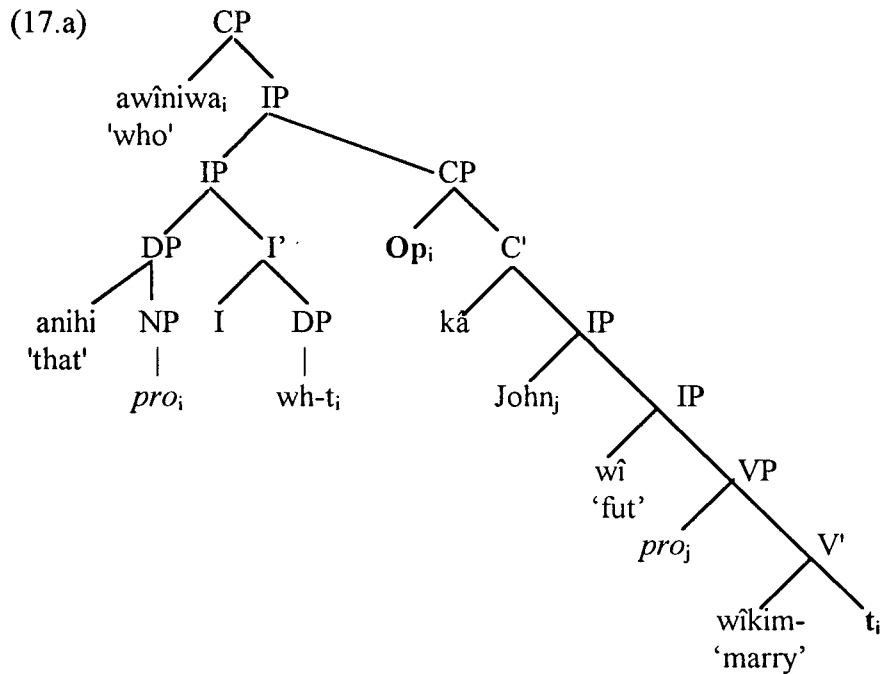
- (15.a) **awîna ana** [Op_i [John kâ-wî-wîkim-â-t]] [-AGR]
 who that (one) John REL-intend-marry-dir-3 3 → 3'-wh
 Who is that one that John will marry? D.263
 Literally: Who is that [Op_i [John will marry t_i]]
- b) **awîna ana** [Op_i [kahkiyaw aniki kâ-wâpam-â-t-ik]] [-AGR]
 who that (one) all those rel-see-dir-3-pl 3.pl → 3'-wh
 Who is it they all saw? D.251.b
 Literally: Who is that [Op_i [they all saw t_i]]

The example in (16) is without a deictic and the wh-word is also [-AGR].

- (16) **awîna** [Op_i [John kâ-ocêm-â-t]] [-AGR]
 who (obv) John REL-kiss-dir-3 3 → 3'-wh
 Who did John kiss?
 Literally: Who is it [Op_i [John kissed t_i]]

In (13.a), for example, there is agreement within the nominal clause *awîni-wa anihi* 'who is that (obviative)' between the wh-predicate and the deictic DP in subject position; and both in turn agree [+AGR] with the obviative status of the referent in the verbal clause. In my analysis, predicate fronting registers this agreement on the wh-word. The operator movement inside the relative clause completes the link identifying the argument referred to in the wh-question. (17) represents (13.a), repeated below, with the relative clause adjoined to IP.

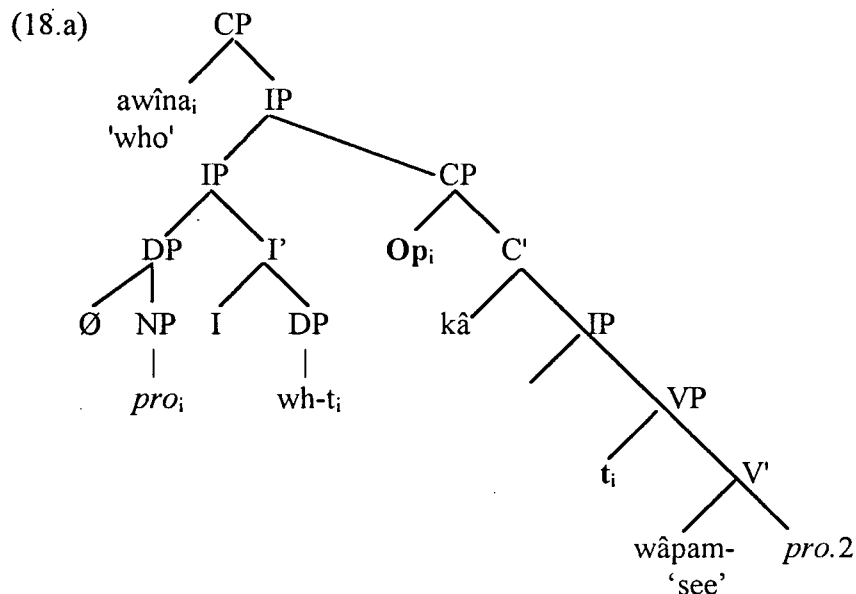
- (13.a) **awîni-wa anihi** John kâ-wî-wîkim-â-t
 Who is that [Op_i [John will marry t_i]]



- b) [CP who_i [IP [IP that *pro* t_i] [CP Op_i [John_j pro_j will marry t_i]]]]
 [_____[+obv]_____] [_____[+obv]_____]]]]

In the following example, representing (14.b), the anaphoric element in the following clause is proximate -- which is not morphologically marked. The above analysis is generalized to the proximate example in (18) as [+AGR].

- (14.b) **awîna** [Op_i [kâ-wâpam-isk]]
Who is it that saw you?

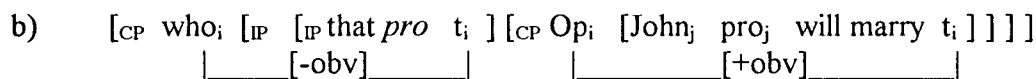


- b) [CP who_i [IP [IP Ø *pro* t_i] [CP Op_i [t_i see *pro.2*]]]]
 [] [-obv] [] []

The object *pro.2* is second person; and because there is only one third person involved, it is 3-proximate in agreement with the wh-word (and the *pro* subject) in the nominal clause.

The diagrams in (19) illustrate example (15.a), which is [-AGR] with the default form of the wh-word. The relative clause is adjoined to IP inside the nominal clause. The proximate subject *John* in the relative clause is coindexed with the subject *pro*, and the remaining pronominal argument moves to Spec CP creating the A'-chain for the null-operator which is associated with *kâ*- clauses. There can be no ambiguity as to the referent of the wh-phrase.

- (19.a)



verbal clause. If there is no deictic in the subject DP, then the *kâ-* complementizer is not obligatory. In all cases, there is agreement for proximate/obviative between the subject and wh-predicate in the nominal clause. However, the agreement of the nominal clause constituents with the proximate/obviative value of the anaphoric element in the following verbal clause is not obligatory. The nominal clause constituents may be morphologically unmarked while referring to a [+obviative] argument of the verb.⁷

Before leaving this section, we can speculate as to why *ê-* complementizer is impossible with NPs introduced by a deictic determiner. Recall that when the subordinate clause has *ê-* complementizer, it is interpreted as conjoined with the matrix nominal wh-clause: (i) Who is he_i & Mary likes him_i. Note that anaphora across coordinate clauses yields the semantics of a restrictive relative clause, i.e., (i) is equivalent to (ii) 'Who is the one who Mary likes'.

Now, if the subject in the nominal clause were introduced by a deictic determiner, and the subordinate clause were introduced by *ê-* complementizer, then the resulting interpretation would be that of an appositive relative: (iii) 'Who is [that pro]_i & Mary likes him_i' (Ross 1967; also see Williams 1988). In sum, anaphora across coordinate clauses, where the antecedent is a DP with a deictic determiner, would not yield the semantics of a restrictive relative but rather that of an appositive relative.⁸ We can therefore suggest that *ê-*

⁷ The reverse is not possible, i.e., the nominal clause constituents cannot be marked [+obviative] while the referent in the following clause is [-obviative].

⁸ D. James (p.c.) observes that, in fact, typical relative clause environments in Moose and Plains Cree, for example, may have *ê-* complementizer, i.e., with a plural head noun, for example. She cites the Plains Cree example: *ni-kî-wâpam-â-wak mitoni ê-iyinîsi-cik*

complementizer is illicit with deictic subject DPs in the nominal clause because the resulting structure would not have the interpretation of a restrictive relative. Conversely, *kâ-* complementizer is licit with a deictic subject DP in the nominal clause precisely because *kâ-* clauses are unambiguously interpreted as relative clauses restricting the reference of the subject i.e., Who is [the [_{NP} *pro*_i [that Mary likes *t*_i]]].⁹

Next we turn to wh-questions which have an *ê-* complementizer.

5.2.2 Wh-questions with *ê-* clauses

Clauses with *ê-* complementizer typically occur as complement clauses; however, they also occur in Nêhiyawêwin wh-questions.¹⁰ In my analysis, there is no necessary operator movement in *ê-* clauses; an *ê-* clause can stand alone as a CP and does not require an antecedent (= head). As a result, a clause with an *ê-* complementizer cannot be hosted inside the nominal clause in the same manner as a *kâ-* clause.¹¹ The alternative is clausal adjunction to CP.

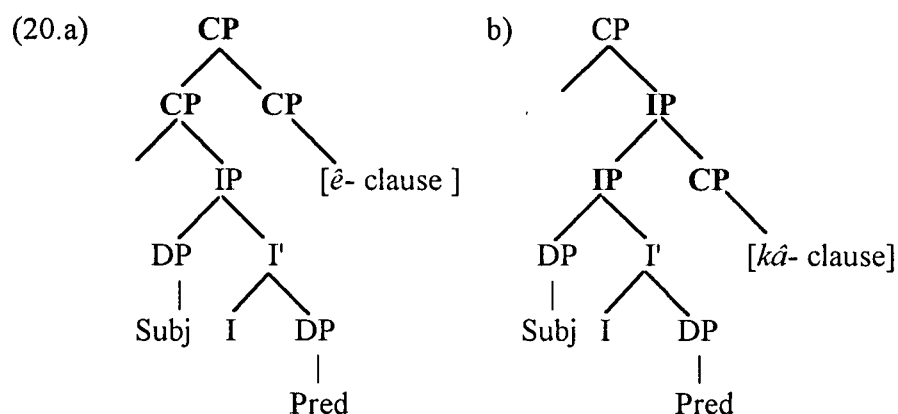
The two configurations in (20) show the difference between an *ê-* clause adjoined to CP in (a) and an IP-adjoined relative clause in (b).

amiskwak I-saw-them really they-be intelligent beavers. 'I saw some very intelligent beavers' (Ahenakew 1982:2). Presumably, this would be an example of an appositive relative.

⁹ Thank you to Hamida Demirdache for this insightful suggestion.

¹⁰ As noted in Appendix C, *ê-* clauses can also occur in a main clause context.

¹¹ One might also argue that a verb may select a clausal complement; however, a nominal predicate cannot.



The CP adjunction to CP configuration in (a) is symmetrical -- the typical conjunction configuration [XP & XP] -- while the DP adjunction to IP in (b) is asymmetrical.

In my proposal for \hat{e} -clauses, the \hat{e} -clause is CP adjoined (= conjoined) to another CP. The question arises: why is there an obligatory anaphoric relation between the subject of the nominal clause and an argument in the adjoined/conjoined \hat{e} -clause, as illustrated in the examples in (21).

(21.a) [Who is pro_i] & [Mary kissed him_i]

b) *[Who is pro_i] & [Mary kissed him_j (= s.b. else)]

I argue that it is null operator movement in the conjoined CP which forces the anaphoric relation between the two arguments. A truly quantificational operator like *every* has a range, i.e., it ranges over a group of possible referents. A null operator, on the other hand, has no range; it therefore requires an antecedent (cf. Chomsky (1982, 1986), Williams 1988)). The evidence for this lies in a variety of structures; for example: (i) purpose clauses, (ii) parasitic gaps, and (iii) corelatives. Before we look at these structures in Section 5.2.2.2,

however, there is a point of clarification which must be made with respect to operator movement.

5.2.2.1 Null-Operator Movement

In the preceding discussion, I have been referring to null-operator movement at either S-structure or at LF in Nêhiyawêwin wh-questions. In Chapter 3, I noted that wh-questions require an A'-chain involving an operator and a trace/ variable. The operator may be either overt or null -- and the operator movement may be overt (at S-structure) or non-overt (at LF). The possible combinations are illustrated in the following table (copied from (61), Chapter 3).

(22) Nêhiyawêwin Wh-operators:

	Overt Operator	Null Operator
SS movement	*wh-movement	<i>kâ-</i> complementizer
LF movement	*wh- <i>in situ</i>	<i>ê-</i> complementizer

I noted that, since there is no overt wh-movement, there must be null-operator movement; and I proposed (as in (22)) that the null operator moves at different levels according to the complementizer used: at S-structure with *kâ-* complementizer, and at LF with an *ê-* clause.

Kâ- complementizer is obligatory in other null-operator environments (focussed NPs and relative clauses) and is also used in a variety of patterns in wh-questions. On the other hand, *ê-* occurs normally in non-operator environments but may also occur in wh-questions. In other words, operator movement with *ê-* complementizer must be an option -- it occurs if

required for wh-interpretation of the wh-question. The question then arises: at which level(s) does operator movement occur with respect to these two complementizers? Example (23) illustrates the possible combinations with respect to complementizers and the level at which operator movement occurs.

(23) **Nêhiyawêwin Null-operator Movement**

	<i>kâ</i> - clauses	both	<i>ê</i> - clauses	
			Wh-Q	Comp.
SS movement	✓	✗	✗	✗
LF movement	✗	✗	✓	✗

I propose that the obligatory occurrence of *kâ*- in null-operator environments like focussed constructions and relative clauses -- as opposed to its absence in non-operator environments -- precludes [✗] LF movement with this complementizer. Therefore, *kâ*- is uniquely associated with S-structure movement.

With *ê*- complementizer, operator movement does not occur in regular complement clauses, but only when forced, as in wh-questions. The two situations are not overtly marked by a contrast in the choice of complementizer. I propose that LF operator movement takes place only in the cases triggered by a wh-environment. Thus, there is a three-way contrast between null operator movement at S-structure with *kâ*- complementizer, LF movement of the null operator with *ê*- complementizer in wh-environments, and the absence of operator movement in non-wh- *ê*- clauses.

5.2.2.2 Null Operator Constructions

We will look briefly at three types of structures to illustrate the role of null operator movement in forcing anaphoric relations between an argument in an adjoined/conjoined clause with an antecedent in a preceding clause. The examples provided are from English and from Hindi.

5.2.2.2.1 Purpose Clauses

Consider the following examples from Rizzi (1986:514). The examples in the purpose clauses in (24.a) and (b) show a gap which is anaphoric with the DP *the dog* in the preceding clause. It should be noted that a resumptive 'it' could occur in place of the gap.¹² Bolded [e] represents the empty category/gap.

(24.a) John bought the dog for Bill to give **e** to Mary.

b) John bought the dog for Bill to give bones to **e**.

The above sentences are represented by the structures in (25) which illustrate the null operator movement in the second clause. The null operator movement creates the gap and provides the link with the coindexed DP in the first clause.

(25.a) John bought the dog_i [_{CP} Op_i [for [_{IP} Bill to give t_i to Mary.]]

b) John bought the dog_i [_{CP} Op_i [for [_{IP} Bill to give bones to t_i.]]

¹² Recall in Chapter 3 example (47), the non-overt counterpart of a resumptive pronoun is *pro*; and *pro* is the constituent which becomes a null operator (Cinque 1990, Browning 1992).

5.2.2.2.2 Parasitic Gaps

A Parasitic Gap is the trace of an empty operator which is parasitic on another operator movement. Parasitic gaps occur in adjoined or conjoined clauses where an operator movement in the main clause is shadowed by a (coindexed) operator movement in the second clause. According to the analysis, this operation involves two distinct operator-variable chains (cf. Chomsky (1982, 1986) for adjunct environments, and Williams (1988) for conjoined environments).

(26.a) Which boy_i did you warn t_i [_{CP} Op_i [before striking PG_i]]?

b) Who_i do you love t_i [_{CP} Op_i [and want to marry PG_i]]?

c) Who_i does Jane respect t_i [_{CP} Op_i [and admire PG_i]]?

In all three examples, wh-movement leaves a trace (gap) in object position of the first verb and allows a corresponding operator movement and a gap in the adjoined/conjoined clause (illustrated in (c)). Thus, there are two A'-chains, the one with the null-operator being dependent on the "real" operator. The null-operator movement explains why the PG must be anaphoric with the wh-phrase, as was the case with the purpose clauses.

5.1.2.1.3 Correlatives

Correlatives are a common phenomenon in Hindi (Dwivedi 1994:8).¹³ In the following set, the (a) example is embedded, i.e., it is in its base position adjoined to the NP which it

¹³ Correlatives as found in Hindi, for example (cf. Bains 1989; Dwivedi 1994; Srivastav 1991a,b) can be much more complex structures with two heads. A comparable English example might be: 'Whichever girl saw whichever boy, she liked him.'

restricts. In (b), the relative is right dislocated. In (a) and (b), the restricted DP is *vo laRkii* 'the girl' and the relative marker *jo* 'rel' is in Spec CP of the relative clause. In the correlative example in (c), the relative marker is the determiner in the DP *jo laRkii* 'which girl' -- and the phrase has quantificational force (Srivastav 1991, Bains 1989). In the original relative clause, the demonstrative *vo* 'the/that one' occurs in lieu of the relative marker as a kind of resumptive pronoun.

(27.a) Embedded Relative:

[vo laRkii]	jo khaRii hai	lambii hai	[vo laRkii]
dem. girl	rel standing is	tall is	dem. girl
'The girl who is standing is tall.			

b) Right-adjoined Relative:

[vo laRkii]	lambii hai	jo khaRii hai	[vo laRkii]
dem. girl	tall is	rel standing is	dem. girl
'The girl who is standing is tall.			
Literally: The girl is tall, who is standing.			

c) Correlative: (cf. similar examples in Bains 1989).

<Relative>		<Correlative>	
[jo laRkii]	khaRii hai	vo lambii hai	[jo laRkii]
rel girl	standing is	dem tall is	rel girl
'The girl who is standing is tall.			
Literally: 'Which girl is standing, that one is tall'			

In the (27.c) structure, the initial *jo*-clause is the relative and the second *vo*-clause is the correlative (Dwivedi 1994:8).

English correlative examples shown below are given in (Dwivedi 1994:112 ff.).¹⁴

¹⁴ According to Dwivedi (1994:2), the correlative precedes the relative in the English structures, the reverse of the Hindi structure in (27.c) above.

- b) What he said, that I didn't understand.
- c) That which you tell me, it I will do. (McGregor 1977)

(29) Whichever man_i Judy married t_i, him_i [_{CP} Op_i [I don't like t_i]]

In summary, we have looked at examples of purpose clauses, parasitic gaps and correlatives. All these are instances where there is obligatory anaphoric relation between a pronominal in an adjoined or conjoined clause with an antecedent in the preceding clause. All of these structures can be shown to involve a null-operator in the dependent clause -- either at S-structure or at LF. The null operator is non-quantificational and has no range; therefore,

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it requires an antecedent to fix its range. It can only acquire an antecedent via predication (Chomsky 1986). Movement creates the open position that allows the rule of predication to apply and, thus, coindex the null operator with an antecedent. The relevant example is repeated here with the LF operator movement indicated in (b).

(30.a) [Who is he] & [Mary kissed him_i]

b) [Who_i is he t_i] & [Op_i Mary kissed t_i]

This provides us with an explanation for the obligatory coreference in wh-questions with an \hat{e} - clause. In my analysis, the \hat{e} - clause (CP) is conjoined to the nominal clause CP containing the wh-phrase, as shown in (20.a).

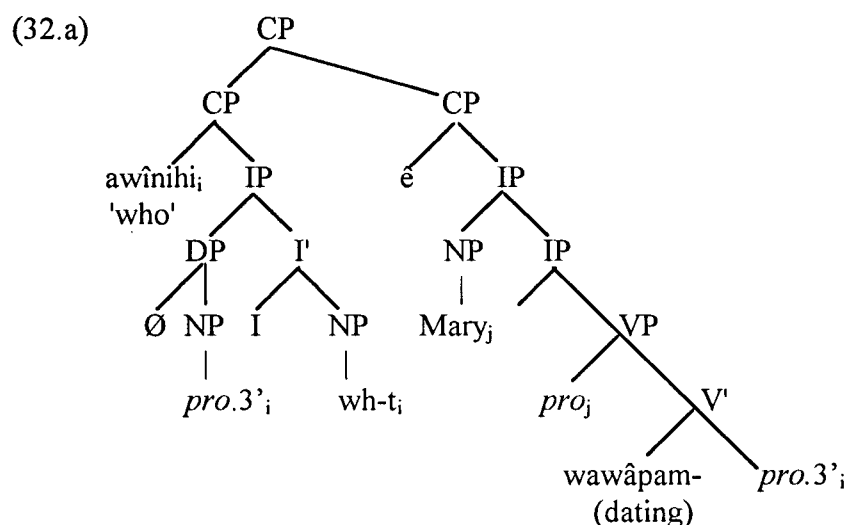
There are two alternatives (Cinque 1990) for a null-operator analysis: (i) the null operator may be base generated in Spec CP, or (ii) there may be operator movement to Spec CP. I am assuming null-operator movement at LF, as discussed above. As we will see in the following chapter, Nêhiyawêwin shows evidence for movement in island effects, including both adjunct islands and wh-islands.

5.2.2.3 Wh-Questions with \hat{e} - Clauses

The following examples involve an \hat{e} - complementizer in the verbal clause. There is no S-structure operator movement in \hat{e} - clauses, and the verbal clause is CP-adjoined to the nominal clause. The null-operator movement occurs at LF. In (31), the anaphoric constituent in the verbal clause is obviative and the wh-phrase is [+AGR].

- (31) **awînihi** [Mary ê-wâ-wâpam-â-t] [+AGR]
 who (obv) Mary conj-redup-see s.o.-dir-3 3 → 3'-wh
 Who (obv) is Mary seeing (i.e., dating)? D.132
 Literally: Who is he_i & Mary is dating him_i

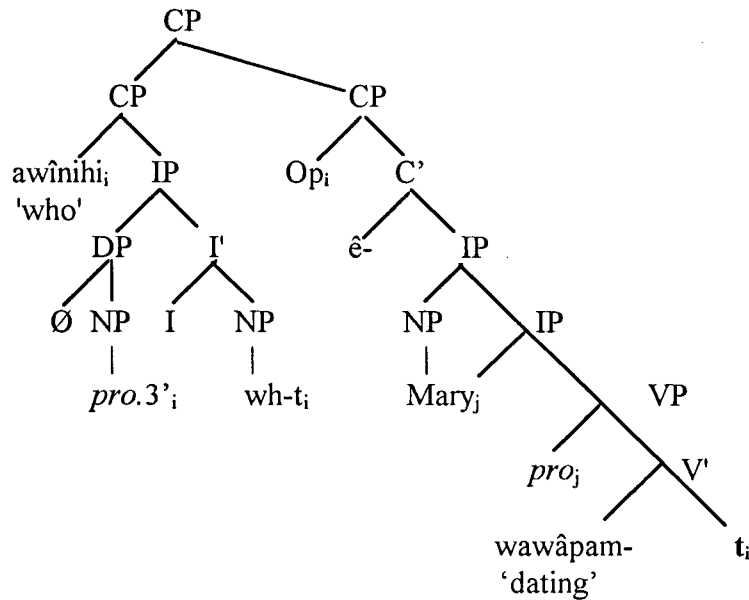
The [+AGR] features of the wh-word is evidence that the *pro* subject in the nominal clause in marked [+obv] in agreement with the intended referent in the following clause. The tree in (32.a) represents the S-structure of this sentence while (b) represents the structure at LF.¹⁶



The [+obv] agreement [3'] is marked in the nominal clause. However, in order to force the coreference between the antecedent and the anaphoric constituent in the following clause, null-operator movement is required at LF. The LF representation of the above structure is represented in (32.b).

¹⁶ I adopt the convention of labelling the *pro* arguments in tree structures for their person reference, (i.e., *pro.3'* (= 3-obviative), *pro.2*, etc. for added clarity.

(32.b)



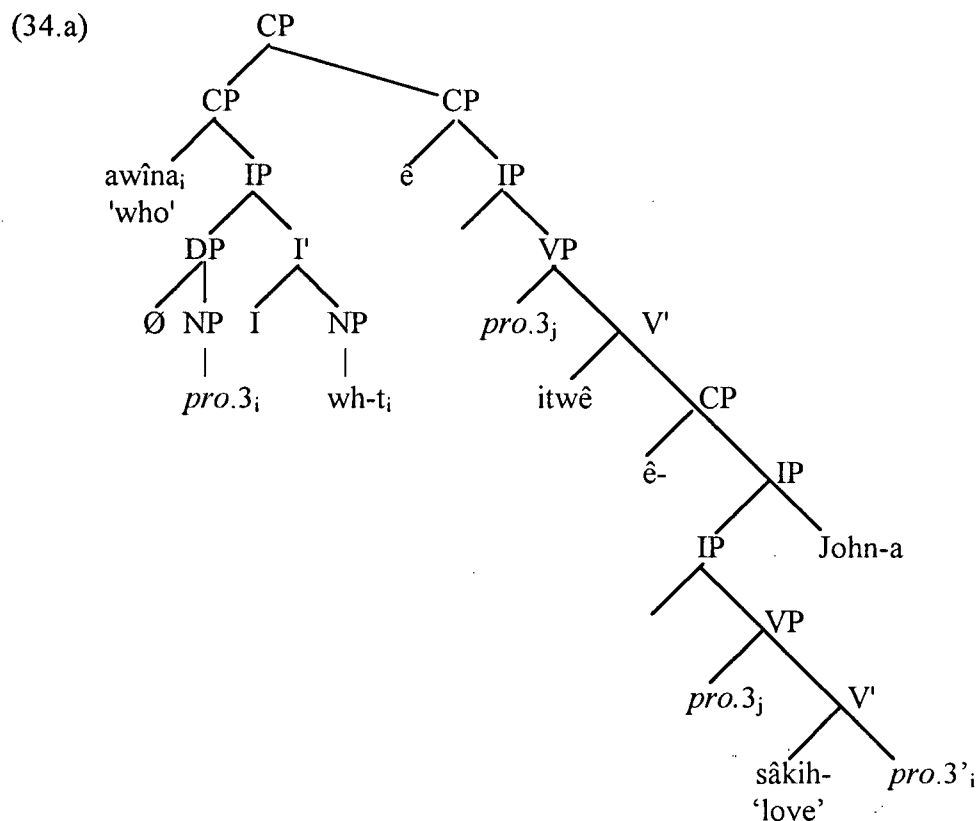
The LF-operator movement forces the (anaphoric) coreference between the obviative object of the verb *wawâpam-* 'dating' and the wh-antecedent in the nominal clause. At LF, this constitutes a parasitic gap structure with two A'-chains (Chomsky 1986a:98). However, this type of structure is also reminiscent of Williams' (1988) ATB analysis involving conjunction.

Consider the [+AGR] examples in (33) which are proximate -- generalizing the analysis for the obviative forms to the proximate examples.

- (33.a) **awîna** ê-wîkim-â-t John-a [+AGR]
 who conj-marry-dir-3 John-obv 3-wh → 3'
 Who married John? J.799
 Literally: Who is she_i & she_i married John
- b) **awîna** ê-wîhtam-isk êko âcimowin [+AGR]
 who conj-tell -3>2 the very one story 3-wh → 3'
 Who told you that story? J.852
 Literally: Who is she_i & she_i told you that story.

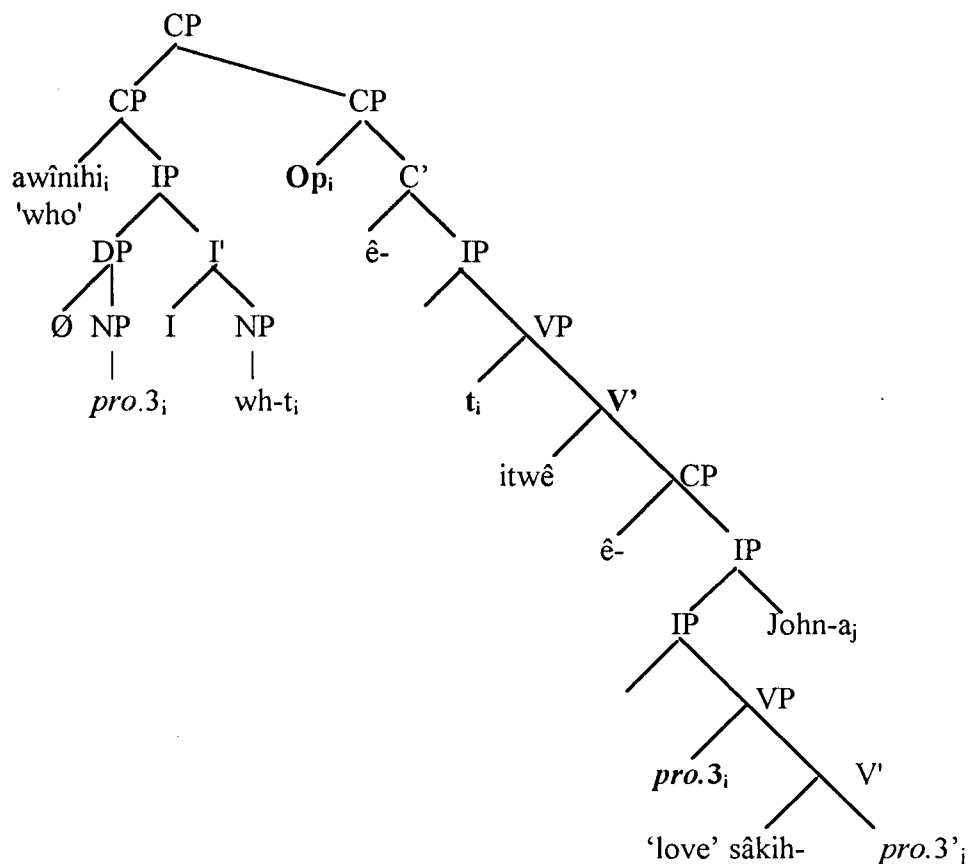
- (33.c) *awîna ê-itwê-t ê-sâkih-â-t John-a* [+AGR]
 who conj-say-3 conj-love-dir-3John-obv 3-wh → 3'
 Who said she likes John? B.122
 Literally: Who is she; & she; said [that [she; likes John]]

The unmarked wh-word represents a proximate argument in the following clause. The S-structure of (c) is represented in (34). This sentence involves three clauses, the nominal wh-clause and two *ê*-clauses, the second embedded as the complement in the first *ê*-clause.



The unmarked subject in the nominal clause agrees with its intended referent in the verbal clause. The LF representation of the above structure is shown in (34.b) and (c).

(34.b)



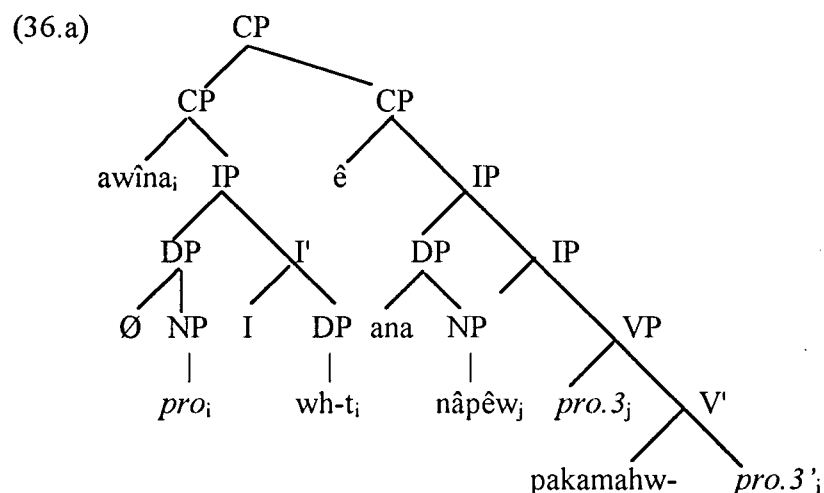
c) [_{CP} Who_i [_{IP} *pro* t_i]] & [_{CP} Op_i [_{IP} t_i said [_{CP} that [_{IP} *pro*_i likes John]]]]

Coreference between the anaphoric *pro.3* and the antecedent in the nominal wh-clause is forced by null operator movement in the top ê- clause of the conjoined structure, leaving a trace in subject position. The coreferring *pro.3* in the embedded complement clause is coindexed with the variable which binds it from the matrix clause. (See Chapter 6 for discussions regarding complement clauses.)

In (35.a) and (b), the unmarked wh-word is [-AGR] with its referent in the following clause.

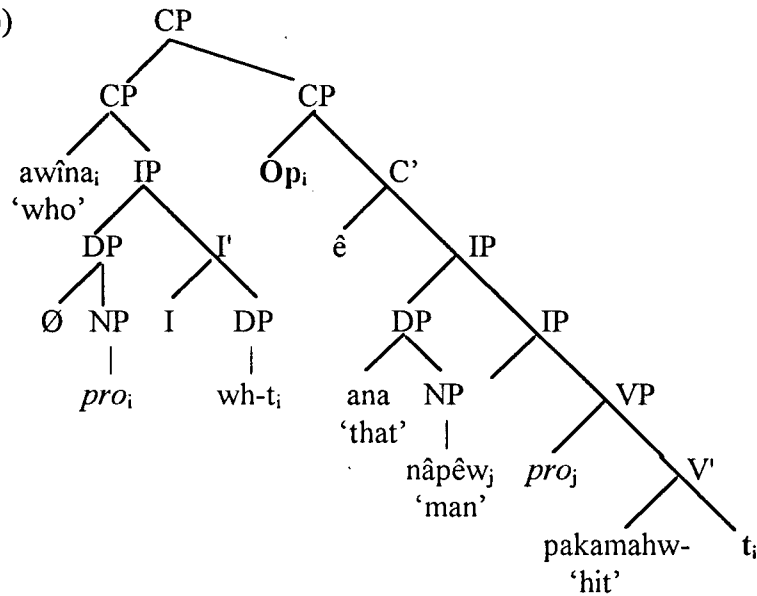
- (35.a) **awîna** ana nâpêw ê-pâ-pakamahw-â-t [-AGR]
 who that man (prox) conj-redup-hit-dir-3 3 → 3'-wh
 Who is that man hitting? MA.158.b
 Literally: Who is he_i & that man is hitting him_i
- b) **awîna** Mary ê-wâpam-â-t [-AGR]
 who Mary conj-see-dir-3 3 → 3'-wh
 Who did Mary see? MA.392
 Literally: Who is he_i & Mary saw him_i

Recall that there is always the option of using the default form for *wh*-words. The generalization seems to be that the use of the default form increases with distance or with interference from some topic-like element between the *wh*-clause and the clause which is the source of the *wh*-extraction. The structure of example (35.a) above is illustrated as in (36). The unmarked form of the subject in the nominal clause is construed with the [+obv] object in the conjoined clause. The proximate subject argument is represented by the overt DP in the clause.



In order to force the coindexing of the antecedent and the anaphoric element in the following clause, as shown in (36.b) and (c), null-operator movement occurs at LF.

(36.b)



c) [CP Who_i [IP *pro* t_i]] & [CP Op_i [IP that man hit t_i]]

With some speakers, the [-AGR] examples with an *ê*- clause have more restricted distribution. The [-AGR] bare *awîna* 'who' wh-phrase is often associated with a sentence which has a topic-like constituent.

(37) *awîna* *wiya* John *ê-ocêm-â-t* [-AGR]
 who EMPH John conj-kiss-3 3 → 3'-wh
 Who did John himself kiss? cf.D.32
 Literally: Who is she_i & John himself kissed her_i

The intensifying emphatic pronominal *wiya* 'himself' (Blain 1994, 1996) only associates with a topic-like overt NP.¹⁷ The complementizer *ê*- shows conjunction with another clausal

¹⁷ It is clear that this is not a focussed NP structure because there is no *kâ*- complementizer on the verb.

constituent, i.e., the wh-phrase. In the following example, an emphatic second-person pronoun affects the of the question.¹⁸

- (38) **awîna** kiya ki-itêyiht-ê-n John ê-pakamahw-â-t [-AGR]
 who YOU 2-think so-th-2sg John conj-hit-dir-3 3 → 3'-wh
 Who do YOU think John hit? D.259
 Literally: Who is he_i & (do) YOU think [John hit him_i]

The speaker would accept only the [-AGR] form of the wh-word -- no doubt due to interference from the intervening topic, which involves an intervening null operator.

Compare this to the companion example with [+AGR] wh-word. Note that *awîna* can occur with (39) but *awînihi* cannot occur with (38).¹⁹

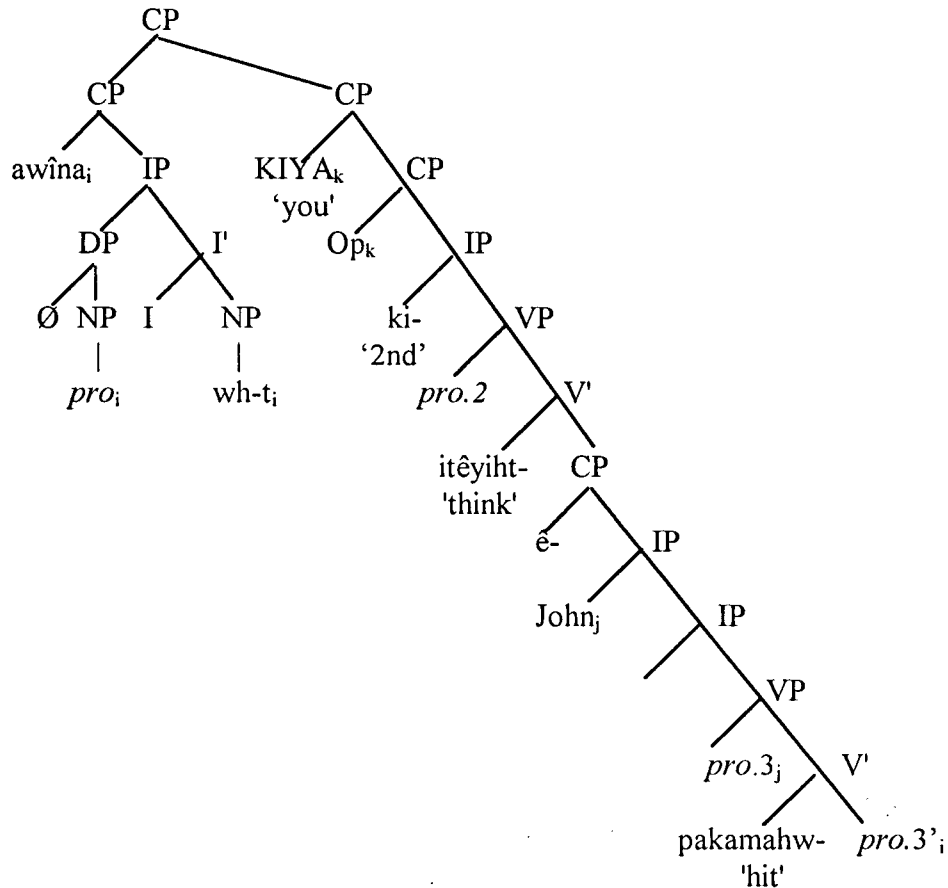
- (39) **awînihi** ki-itêyiht-ê-n John ê-pakamahw-â-t [+AGR]
 who 2-think so-th-2sg John conj-hit-dir-3 3 → 3'-wh
 Who do you think John hit? D.260
 Literally: Who is he_i & (do) you think [John hit him_i]

The [-AGR] wh-word in all these examples refers to the obviative object in a following clause. In (39), the referent occurs in a clause which is the complement of another (independent mode) clause. The structure of example (38) is illustrated in (40); the emphatic pronoun is shown adjoined to CP in the topic position in accordance with Dahlstrom (1995), and there is corresponding operator movement into Spec CP.

¹⁸ According to Dahlstrom (1995), overt personal pronouns (in Algonquian languages in general) typically represent a new topic (given the Independent mode of the verb *ki-itêyihtên* 'you think s.t.', the pronoun cannot be interpreted as focussed).

¹⁹ Generally, where *awînihi* occurs, you can always use *awîna* (the default form). However, the reverse is not necessarily true.

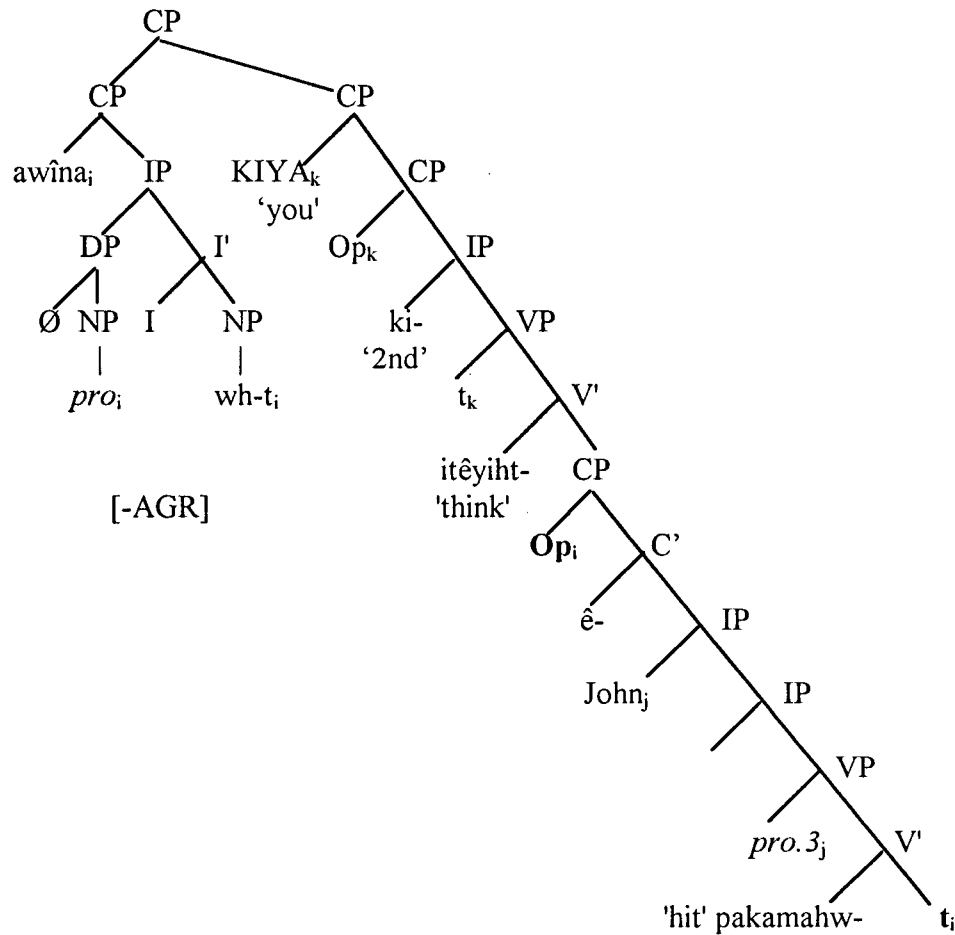
(40.a)



The unmarked subject in the nominal clause is [-AGR] with the obviative status of its intended referent in the verbal clause. The conjoined CP has the anaphoric constituent embedded in the complement clause as the object of *pakamahw-* 'hit'.

The LF representation of the above structure is shown in (40.b). There is null-operator movement within the complement clause -- as well as (topic-related) null operator movement to Spec CP of the matrix clause. The operator movement in the complement clause forces the anaphoric link with the antecedent in the wh-clause, according to the obligatory pattern shown in the gloss of (38). However, agreement for [+obviative] between the embedded operator-variable chain and the wh-phrase is disallowed.

(40.b)



This LF structure is represented in the bracketed structure in (c) for added clarity:

(40.c) $[_{CP} \text{Who}_i \text{ } [_{pro_i \text{ } t_i}]] \text{ \& YOU } [_{CP} \text{Op}_k \text{ } [t_k \text{ say } [_{CP} t_i \text{ } [\text{John hit } t_i]]]]$
[-AGR] ** [+obv]

This [-AGR] form frequently occurs with other longer distance operator extractions, as shown in (41) in which the referent of the wh-word (i.e., the null-operator extraction site) is even more deeply embedded.

(41.a) **awîna** ê-itwê-yan ê-itêyiht-am-an John ê-ocêm-â-t [-AGR]
 who conj-say it-2 conj-think-th-2 John conj-kiss-dir-3 3 → 3'-wh
 Who did you say you think John kissed? B.497
 Literally: Who is he_i & you said [you think [John kissed him_i]]

As in (40.b) above, the LF wh-interpretation forces operator movement of the coindexed *pro* of the most deeply embedded clause to Spec CP and then to each intermediate Spec position creating a chain to Spec CP of the matrix *ê*- clause, as shown in (41.b).

(41.b) LF: [Who_i (is) pro_i t_i] & [Op_i [pro_j say] [t_i [pro_j think] [t_i [John kiss t_i]]]]

All the intervening subjects are accounted for -- two of them involve second person, and proximate *John* in the final clause is coindexed with the subject *pro*. In examples of this sort, the *awînihi* 'who' form can usually be substituted; however, the sentence was usually presented by the speaker with the default unmarked form of the wh-word.

5.2.3 Summary

In Section 5.2, I have provided an analysis for wh-questions with *kâ*- complementizer and with *ê*- complementizer. With the *kâ*- complementizer on the verb, the wh-expression may involve the bare wh-word or may include a deictic (i.e., *ana* 'that'). The deictic is prohibited in a wh-question with an *ê*- clause.²⁰ With both *ê*- clauses and *kâ* clauses, we saw examples where the wh-word is [+AGR] with its referent (the anaphoric constituent) in a following clause and we saw examples where the wh-word is [-AGR] with its referent.

²⁰ Why do wh-questions with *ê*- clauses not contain a deictic determiner in the nominal wh-clause? I suggest that the [+deictic] wh-phrase forces a focus type construction (i.e., with S-structure operator movement in the verbal clause and *kâ*- complementizer. Focus constructions never involve *ê*- clauses.

In my analysis, a *kâ*- clause has S-structure null-operator movement (i.e, a relative clause structure). The *kâ*- clause is hosted by the nominal clause in an IP-adjoined position.²¹ A clause with *ê*- is CP adjoined to the nominal clause CP and the two clauses get a conjoined reading. There is usually no operator movement in *ê*- clauses -- which typically occur as complement clauses. However, wh-questions require movement of an operator and an operator-variable chain in order to force coreference between the anaphoric constituent in the verbal clause and the antecedent in the nominal wh-clause.²²

²¹ The two patterns for *kâ*- clauses have been given the same basic analysis above; however, there is clear evidence (see Chapter 6) that they are different. The difference requires further study as to the semantics of these determiners in wh-questions and focus structures in general.

²² This can be interpreted as two types of relativization strategies -- one with an overt relative clause and the other via conjunction (cf. Ross 1967, Williams 1988).

Chapter 6

ISLANDS AND WEAKEST CROSSOVER

6.0 Introduction

In this chapter, I extend the investigation of Nêhiyawêwin wh-questions. Using the analysis for basic wh-questions developed in Chapter 5, we will consider the evidence for extraction from more complex structures including wh- and complex-NP Islands. In so doing, I show that the conclusions drawn from Chapter 3 -- i.e., that Nêhiyawêwin wh-questions involve null-operator movement rather than wh-movement as in Mohawk (Baker 1996) -- are the correct conclusions.

In Section 6.1, we examine the evidence for extraction asymmetries between complement clauses and adjunct clauses. Adjunct clause examples involve clauses with *ôsam* 'because' and wh-islands occurring with wh-words, i.e., *tânêhki* 'why', and with *kîspin* 'whether, if'. On the basis of the evidence for long-distance extraction, I conclude that Nêhiyawêwin complement clauses are in argument position. We will see that extractions from adjunct clauses are illicit; and, further, that extraction from wh-islands in complement position is illicit. Both these facts will be derived from Huang's (1982) Condition on Extraction Domains.

In Section 6.2, we look in detail at the evidence for Weak Crossover. Baker's (1996) parasitic gap analysis for Weak Crossover in Mohawk makes the wrong predictions with respect to relative clauses in Nêhiyawêwin. I argue that the absence of Weak Crossover in

Nêhiyawêwin is due to the non-quantificational nature of the operator which undergoes movement in wh-questions.

The arguments are based on the analysis proposed by Lasnik and Stowell (1991) and Demirdache (1997) to account for the absence of WCO in some structures in English. This analysis provides an account of the absence of WCO based on universal principles; and I extend this analysis to languages as diverse as English and Nêhiyawêwin. This contrasts with Baker's analysis, which is based on language-specific properties of Mohawk.

6.1 Complement Clauses vs. Adjunct Clauses

In this section we look at the evidence for wh-extraction from complement clauses and adjunct clauses. Complement clauses in argument position allow wh-extraction while adjunct clauses do not. If all clauses in Nêhiyawêwin are adjoined or conjoined in the same manner, then we should not expect to get these extraction asymmetries. I conclude that, since extraction asymmetries do exist between Nêhiyawêwin complement clauses and adjunct clauses, Nêhiyawêwin complement clauses cannot be base generated in adjunct positions.

6.1.1 Long-Distance Extractions

In the following examples, we will see that long-distance extractions are possible from complement clauses. Therefore, we can argue that these clauses must be in argument positions. Consider:

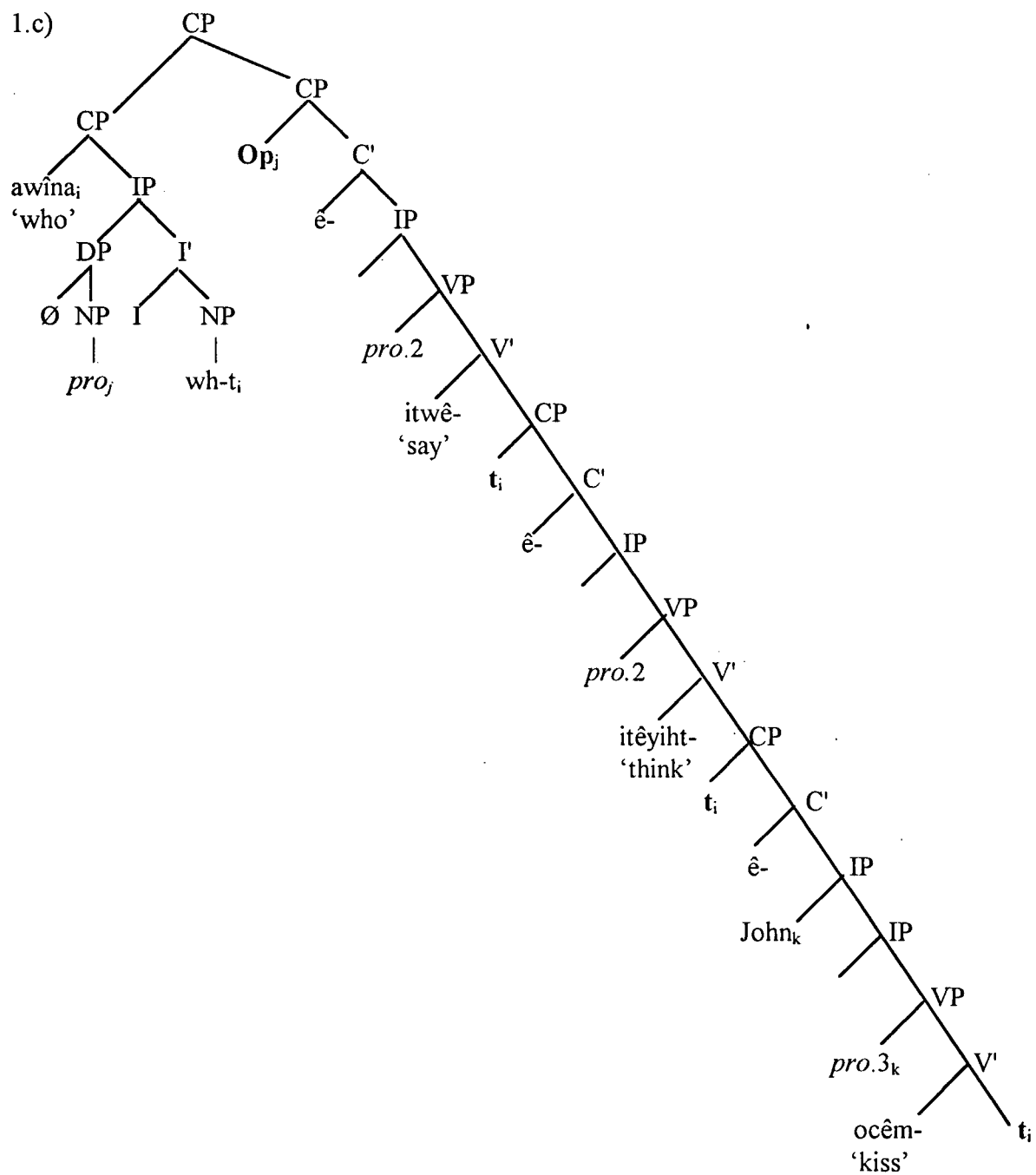
- (1.a) awîna ê-itwê-yan ê-itêyiht-am-an John ê-ocêm-â-t
 who conj-say it-2 conj-think-th-2 John conj-kiss-dir-3
 Who did you say you think John kissed? B.497

Since the complementizer in (1.c) is \hat{e} -, the LF configuration of this sentence has null-operator movement from the most deeply embedded complement clause as in (1.b), represented by the tree structure as in (1.c). The operator moves from the lowest object position to the highest Spec CP successive cyclically.

(1.b) [Who is pro_i] & Op_i [you said t_i [you think t_i [John kissed t_i]]].
|_____||_____||_____||

In the tree structure in (1.c), the matrix \hat{e} -clause is CP-adjoined to the nominal wh-clause. The operator movement shown is at LF.

Given that the long-distance extraction in (1) is grammatical, we can assume that complement clauses are in argument position. If they were in adjoined position, we would expect (1.a) to be ungrammatical: it would be ruled out as a violation of the CED (Condition on Extraction Domains, cf. Huang 1982) which prohibits extraction from adjunct clauses.



The operator movement leaves traces in all the intermediate Spec CP positions.

6.1.2 Island Extractions

In contrast to complement clauses, which freely allow extraction, adjunct clauses do not allow extraction. These clauses are referred to as adjunct islands, and the Condition on Extraction Domains (CED) prohibits movement out of adjunct clauses. On the other hand, movement out of wh-questions in complement position violates subadjacency. In the following sections, we will be looking at three types of islands: (i) adjunct Islands with *osâm* 'because' (6.1.2.1); (ii) indirect questions introduced by a wh-phrase (6.1.2.2); and (iii) an indirect question introduced by *kîspin* 'if, whether' (6.1.2.3). The examples occur with various combinations of clauses involving complementizer *kâ-* (relative clause) and/or *ê-*.

6.1.2.1 Adjunct Islands with *osâm* 'because'

In the example in (2), the relative clause is adjoined to IP. It contains an *osâm* 'because' clause introduced by the *ê-* complementizer which is itself adjoined to IP¹ inside the relative clause. In accordance with Huang's (1982) Condition on Extraction Domains (CED), extraction from the strong island with *osâm* is ungrammatical.

- (2) *awîna *kâ-mâto-yan osâm ê-pîkon-â-t* kit-awâsisihkân-a
 who rel-cry-2 because conj-break-dir-3>3' 2-doll-obv
 Who did you cry because ... broke your doll? B.431

[Who is pro_i [Op_i [[you cried] [**because** t_i broke your doll]]]]
 |—————*—————|

¹ Recall that CPs with *ê-* are CP-adjoined to a preceding nominal clause (i.e., a clause without a verb). However, the clause introduced by *osâm* 'because' is dependent on the preceding verbal clause; hence the IP-adjunction. As noted by R-M Déchaine (p.c.), VP-internal adjunction is unlikely since all VP-internal operations seem to be valency affecting (Goddard 1990)

In (3), the verbal clause has \hat{e} - complementizer and is CP-adjoined to the nominal wh-clause. The *because* clause has $k\hat{a}$ - complementizer and, thus, involved S-structure operator movement. Crucially, since it is an adjunct clause inside the matrix \hat{e} - clause, operator extraction from the *because* clause is, once again, prohibited by the CED.

- (3) * awînihi Mary \hat{e} -pasîkwêtah-â-t John-a [osâm $k\hat{a}$ -ocêm-â-yi-t]
 who (obv) Mary conj-slap-dir-3>3' John-obv because rel-kiss-dir-obv-3>3'
 Who is it that Mary slapped John because he kissed (her)? B.340

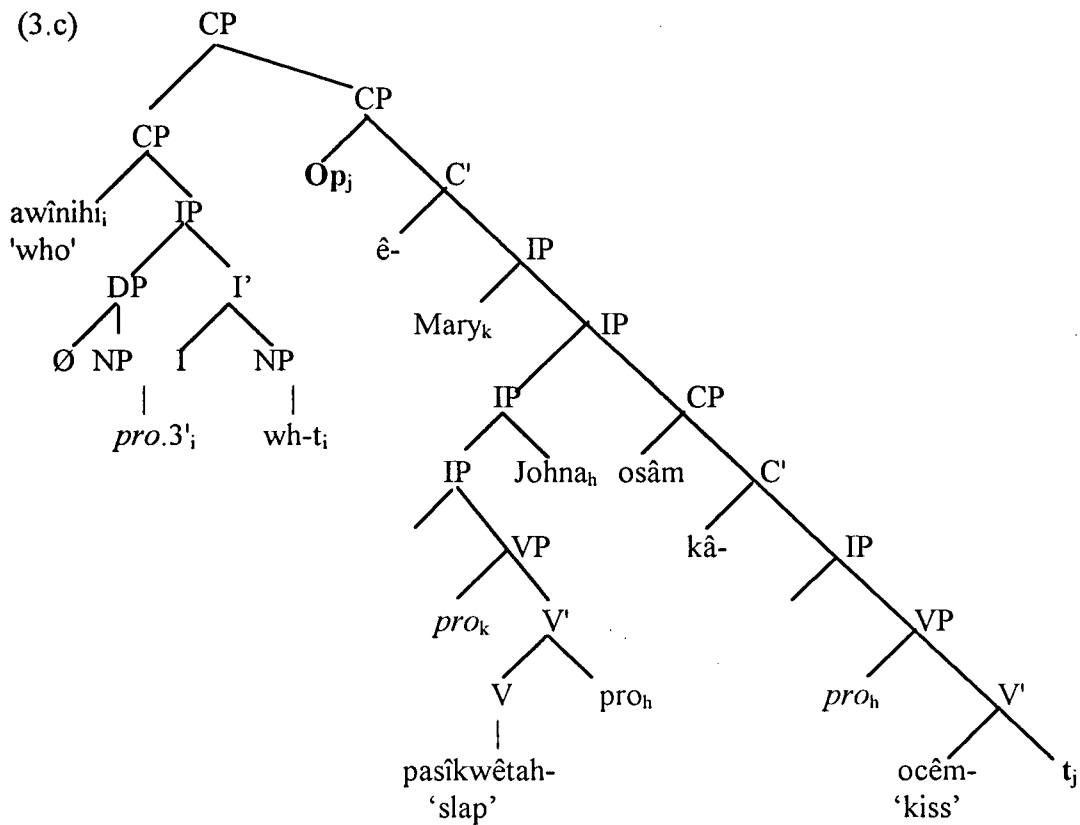
As noted above, *because* clauses are adjuncts and strong islands (cf. Cinque 1990); and extraction is disallowed regardless of the nature of the clause, i.e., the CED holds at S-structure and at LF.

In the diagrams in (3.b) and (c), the clause with \hat{e} - is CP-adjoined to the nominal wh-clause. The operator movement shown is at LF and it violates the CED since it takes place from within an adjunct clause.

- (3.b) [Who is pro_i] & [Op_i [Mary slapped John [because [he kissed t_i]]
 | _____ * _____ |

In the tree below, the adjunct clause with $k\hat{a}$ - is IP-adjoined inside the matrix \hat{e} - clause.²

² Recall also that I argued in Chapter 5 that \hat{e} - clauses are CP adjoined to nominal clauses, i.e., an \hat{e} - clause cannot be hosted by a nominal clause. However, \hat{e} - clauses may occur in argument position of the verb as seen in (1) and may otherwise be adjoined as a dependent clause of another verbal clause as in (3).



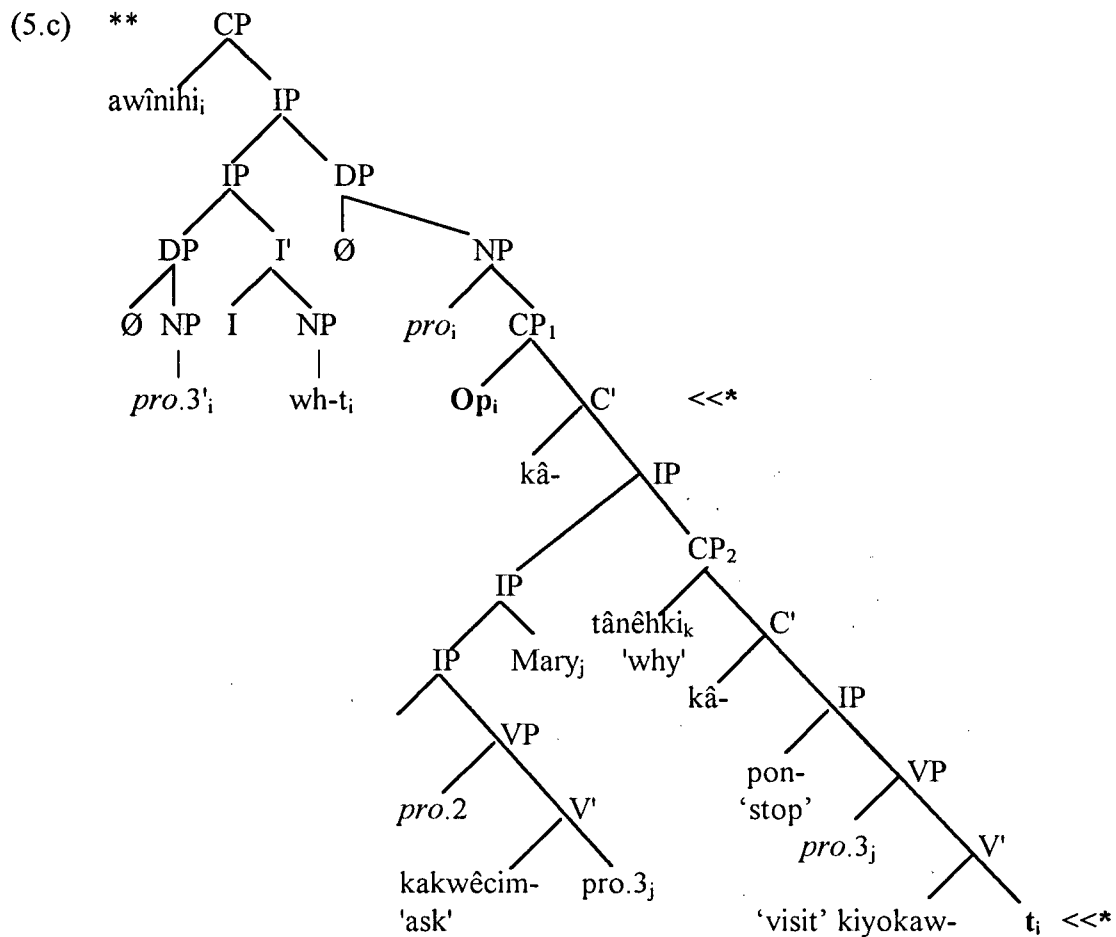
As noted above, null-operator movement is prohibited from the adjunct *osâm* 'because' clause by the CED.

6.1.2.2 Wh-Islands

A complement wh-question is an “island” for extraction, i.e., operator movement is prohibited from wh-questions. In English, these island effects are attributed to Subjacency (Chomsky 1973, 1986; and cf. discussion in Ouhalla 1994, for example).

(4) Subjacency

Movement cannot cross more than one bounding node in a single step, where bounding nodes are IP and DP.



Recall that the relation between adjunct wh-phrase and its trace is not mediated by a null operator (which is not the case with argument-type wh-phrases). Nothing which follows hinges on this assumption.

The verb *ask* in the intervening clause is a three-place verb.⁵ Semantically, there are two possible referents inherent in the *ask* clause (other than the two arguments -- agent and goal -- marked on the verb): you ask Mary about someone; or alternatively you might ask Mary a question like *Why did ..?* In both cases, these additional referents -- the oblique phrase or the wh-question --- are IP-adjoined within the clause containing a transitive verb

⁵ The glossary in Wolfart and Ahenakew (1993:108) gives the following: ASK: *kakwêcim-* VTA 'ask s.o.; make a request of s.o.; ask s.o. about (it/them).

(VTA) with agreement morphology for two animate arguments. Only the inflectionally marked arguments can be in A-positions (compare examples (5) and (9), and observe fn. 9).

There are two possible analyses of (5.c): (i) the extraction [$<<*$] from the wh-island must cross two IP nodes violating subadjacency (since CP_2 is not available as an escape hatch -- it is occupied by *why*); or (ii) this is simply a CED violation involving extraction from an adjunct clause. Given the adjunct position of the wh-question, this must be considered a CED violation.

In the examples in (6), with the wh-word *kîkwâyiw* 'what (obv)'⁶, the following clause has *ê*- complementizer. The *ê*- clause is CP-adjoined to the nominal wh-clause. The embedded *who* (nominal) clause has an IP-adjoined *kâ*- clause and the entire *who* question is in complement position in the *ê*- clause -- the question as a whole is not an adjunct -- although, you will note that the verbal clause from which the extraction is to be made is itself an adjunct within the *who* question. The verb *kiskêyiht*- 'know it' is a VTI verb with an inanimate object, i.e., the wh-question. Null-operator extraction from the complement wh-clause is not licit.

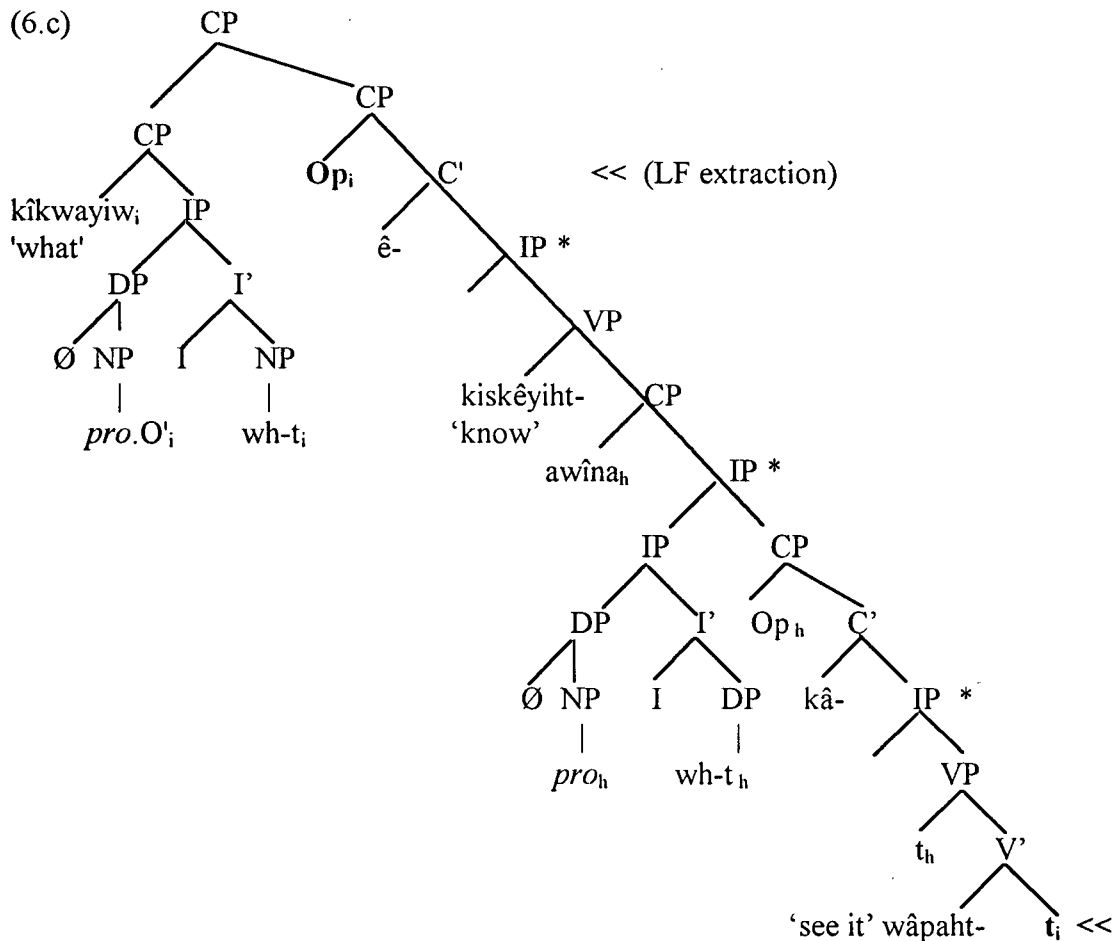
(6.a) *[*kîkwâyiw*] & [*ê*-*kiskêyiht*-am-an [*awîna* [*kâ*-wâpaht-am-k]]]
 what-obv conj-know-th-2sg who REL-see s.t.-th-3
 What is it that you know who saw (it)? B.424.b

b) [What is pro] & [Op_i [you know [**WHO** is pro_j [Op_j [t_j saw t_i]]]]]
 | * * * |

⁶ This form of *kîkwây* 'what' is apparently a variation on the obviative form (H.C. Wolfart, p.c.). However, I question whether it is not an actual wh-predicate with verbal agreement for third-person, i.e., *kîkwây-i-w* = what-vb-3 'What is it?'.

The ($Op_j \dots t_j$) movement in (6.b) and (c) below occurs at S-structure in the embedded wh-question with *kâ-* complementizer. The matrix clause has *ê-* complementizer; therefore, extraction from its complement would occur at LF in my analysis.

The LF extraction of the object argument is ungrammatical. Why? Because, given the syntax proposed for wh-questions in Nêhiyawêwin, extraction from within a wh-question will always be taking place from within an adjunct island.⁷ In (6), extraction of the object takes place from the verbal clause adjoined to the nominal wh-clause; and, as such, it is ruled out by the CED.



⁷ This is true whether the wh-question is itself in complement position as in (6) or in adjunct position as in (5).

To conclude, the proposal that wh-questions in Nêhiyawêwin involve a nominal clause (Who is *pro*), whose subject is anaphoric with an argument in an adjoined clause, elegantly explains why extraction from a wh-question is ungrammatical. Whatever the combination of *ê*- and/or *kâ*- complementizers involved, it clearly has no effect on the grammaticality of the sentences in (5) and (6). Though, in my analysis, *kâ*- clauses have S-structure null-operator movement and *ê*- clauses have LF movement, the choice of complementizer does not affect the grammaticality of the wh-island extractions.

6.1.2.3 Wh-Islands with *kîspin* 'if, whether'

Clauses with *if* and *whether* are also classified as wh-structures. In example (7) below, the relative clause is IP-adjoined inside the nominal wh-clause. The island involves *kîspin* 'if, whether' and has *kâ*- complementizer with S-structure operator movement. The *whether* clause is an indirect question and is IP-adjoined in the 'ask' clause because it is not licenced by agreement morphology.⁸ The (S-structure) operator extraction from the (adjunct) *whether* clause involves a CED violation because it involves extraction from an adjunct clause.

- (7.a) *awîna *kâ*-kakwêcim-i-yan *kîspin* John *kâ*-sâkih-â-t
 who rel-ask-dir-2>1 whether John rel-love-dir-3
 Who did you ask me whether John loves? B.355

- b) [Who is *pro*_i [Op_i [you asked me] [**whether** [John loves *t*_i]]]]

⁸ D. James (p.c.) refers to *kîspin* as an embedded yes/no question. Nêhiyawêwin typically has *ci* 'Q-marker' in yes/no questions. However, *ci* is not used in these constructions.

In (9), the verb *ask* is a three-place verb (compare with (5) above). In this example, the deictic *ana* 'that (animate one)' forces the animate "about *pro*" reading of the *ask* clause generating a corresponding (IP-adjoined) oblique *pro*.⁹ This *pro* becomes the target for questions. In other words, *ana* forces the extraction from the *ask* clause as shown in (9.b) and (c). In these examples, a short distance extraction is forced from the matrix clause -- thus avoiding the necessity for long-distance extraction from the island (wh- or adjunct). In this manner, this consultant is able to avoid the subjacency and CED violations, and the resulting sentence is grammatical.¹⁰

- (9.a) Awîna ana kâ-kakwêcim-i-yan tânêhki kâ-sâkih-â-t Mary-wa
 who that rel-ask-dir-2>1 why rel-love-dir-3 Mary-obv
 Who is it that you asked me why he loves Mary? J.962

- b) Who is that one [Op_i [[you asked me] about t_i]]] & [Why does *pro*_i love Mary?]
 |-----|

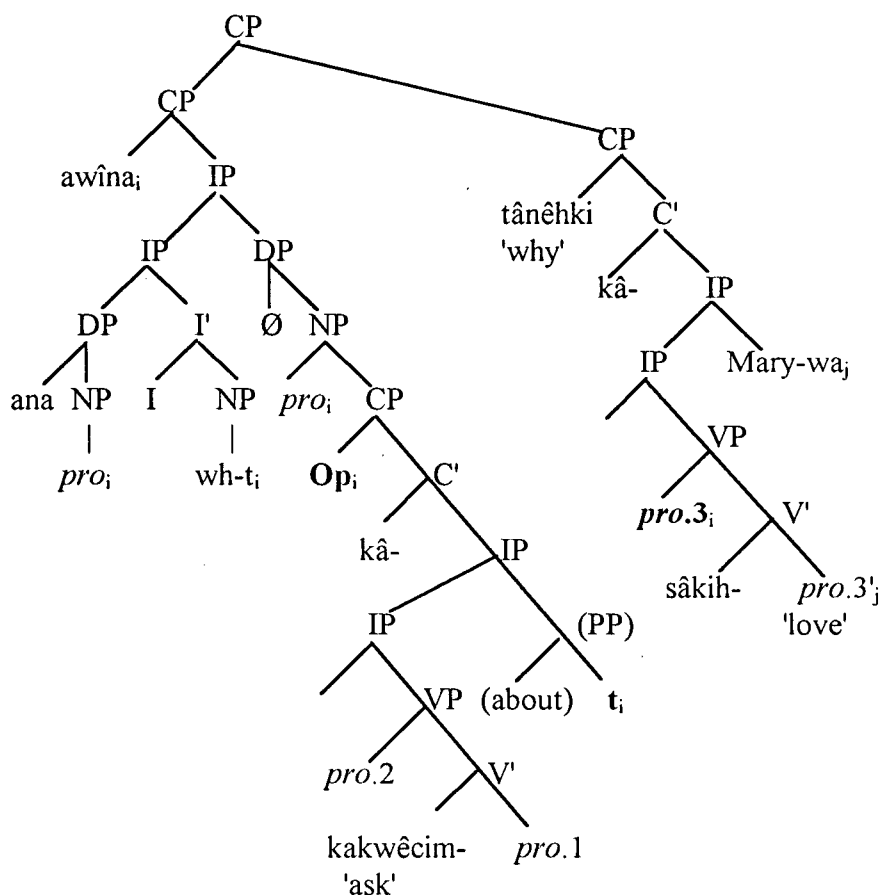
The resulting grammatical sentence is then a conjunction of two separate wh-questions.

The *pro* in the conjoined *why* question is coindexed with its antecedent as shown in the bracketed structure above. The structure proposed for this sentence is shown in (9.c). The wh-phrase is coindexed with the proximate referent (about *pro*.3) in the relative clause which is adjoined to IP in the subject position of the nominal clause. The *tânêhki* 'why' clause is adjoined to CP and has the interpretation of a conjoined clause.

⁹ Browning (1982) states: "All empty categories are subject to an identification requirement. When *pro* is not identified by a strong agreement, it has to move to an A'-position in order to be identified via a rule of predication that co-indexes it with an antecedent."

¹⁰ I ran both sets of examples by another speaker, Mary Ann, reading the Cree and asking for grammaticality judgements. The Island extraction examples in the previous section were not good to her while the examples in this section ranged from sort-of-okay to good.

(9.c)



We can assume either that coindexation takes place in the same way as antecedent-*pro* relations in other structures or that this anaphoric relation is established via operator movement. This would yield basically an ATB extraction, i.e., with two conjoined clauses -- [you asked me about *pro*] and [why does *pro* love Mary]. Coindexation between these *pros* and the *pro* of the nominal clause [Who is that *pro*] would be forced by null operator movement across the board (that is, in each conjunct). Note that, if this is the case, then subadjacency cannot hold at LF (as is standardly assumed) since LF operator movement to the Spec of the second conjunct (i.e., in the *why* clause) would be a subadjacency violation. As shown above, the sentence is grammatical.

The CED violation in the *kîspin* 'if, whether' examples in (10) uses similar strategies -- although, in this case, the final CP (as well as the oblique phrase) is adjoined within the *kâ*-clause.

- (10.a) awîna ana John kâ-kakwêcim-isk kîspin Bill-a ê-wîkim-â-yi-t
 who that John rel-ask-3>2 if Bill-obv conj-marry-dir-obv-3
 Who is it that John asked you if Bill married? J.977

b) Who is that pro_i [Op_i [IP [[John asked you] about t_i] (and) if Bill married pro_i]]

The coindexed *pro* in the IP-adjoined *kîspin* 'if' clause is bound by the trace in the IP-adjoined oblique phrase.

There are also examples which use the same tactic to avoid CED violations in adjunct islands with *osâm* 'because' as illustrated in (11). In the following example, the *because* clause with *ê*- is adjoined to IP inside the IP-adjoined relative clause. The short-distance extraction involves an oblique *pro* in the matrix clause as we saw in examples above. The coindexed *pro* in the IP-adjoined *osâm* 'because' clause is anaphoric with the trace in the IP-adjoined oblique phrase, as shown in (11.b).

- (11.a) awîna ana kâ-mâto-yan osâm ê-pîkon-â-t kit-awâsihkân-a
 who that (one) rel-cry-2 because conj-break-dir-3 2-doll-obv
 Who is it that you cried because he broke your doll? J.996

b) Who is that pro_i [Op_i [IP [[you cried] about t_i] because pro_i broke your doll]]

In summary, we have seen that extractions are possible from complement clauses while there is no extraction from adjunct clauses. This indicates complement clauses are in argument position. We have also seen that extractions are prohibited from wh-questions both

as adjuncts and as complements of the matrix verb. Extraction from adjunct islands violates the CED (cf. Huang 1982). The ungrammaticality of extraction from wh-islands provides strong support for the analysis of wh-questions defended here: all wh-questions involve adjunction (either to IP or CP) with respect to the nominal wh-clause itself. Hence the CED uniformly accounts for the evidence presented here.

6.2 Weak Crossover vs. Weakest Crossover

In this section we look at the evidence for Weak Crossover (WCO) in Nêhiyawêwin. Weak Crossover is a test for wh-movement. We noted in Chapter 3 that Baker's (1996) parasitic gap analysis accounts for the WCO evidence in Mohawk. However, this parasitic gap analysis makes the wrong predictions for Nêhiyawêwin which does not show evidence of WCO effects.

In Baker's analysis, there is wh-movement of the wh-words from argument position to Spec CP. For Nêhiyawêwin, however, I look to the analysis in Lasnik and Stowell (1991) which accounts for the absence of WCO in some constructions in English with an analysis which depends on the nature of the operator. This analysis is termed Weakest Crossover.

6.2.1 Weak Crossover

Weak Crossover is a diagnostic for wh-movement within a clause. Consider the English sentences in (12), (a) shows a pronoun embedded in a possessive NP subject and coindexed with an NP in object position. This example is licit because the object NP is not bound by the pronoun inside the complex NP. The wh-movement in (b) leaves a trace in object position of

the clause creating a Weak Crossover violation.¹¹ When the possessive NP is in object position as in (c), the wh-movement in (d) does not show WCO effects.

- (12.a) [His_i dog] chased John_i.
b) * Who_i did [his_i dog] chase t_i?
c) John_i chased [his_i dog].
d) Who_i t_i chased [his_i dog].

The same evidence occurs with relative clauses in (13). When the complex NP is in subject position and the wh-variable precedes the pronoun as in (b), once again the sentence is ungrammatical. The subject/object asymmetry holds for English relative clause examples as shown by the grammaticality of the example in (d).

- (13.a) [The woman he_i loves] chased John_i.
b) * Who_i did [the woman he_i loves] chase t_i?
c) John_i chased [the woman he_i loves]?
d) Who_i t_i chased [the woman he_i loves]?

The configuration which violates WCO is shown in (14) where the coindexed pronoun precedes the trace of the moved wh-word.

- (14) * Who_i ... he_i ... t_i?

These phenomena are descriptively captured in the Leftness Condition (Chomsky 1976, Koopman and Sportiche 1982) -- a version of which is presented here:

(15) **The Leftness Condition:**

A wh-trace cannot be co-indexed with a pronoun to its left.

¹¹ For various versions of Weak Crossover, see Chomsky (1976), Koopman and Sportiche (1982), and Reinhart (1983:122), for example.

I do not depend on any specific theory of WCO. However, because the analysis in the following sections should hold regardless of the principles of the grammar used to derive WCO, I use the descriptive generalization as stated in The Leftness Condition in (15).

6.2.1.1 Weak Crossover in Mohawk

Mohawk is a rich head-marking language with *pro* in argument positions and overt NPs adjoined to IP. Baker (1996) claims that there is wh-movement in Mohawk and thus predicts Weak Crossover effects. However, Baker shows that there are no subject/object asymmetries with respect to either possessor phrases (which never trigger WCO) or relative clauses (which always trigger WCO). WCO tests show that possessor phrases are grammatical in subject and in object position as shown in (16):

- (16.a) Uhka wa'-te-shako-noru'kwanyu-' **rao-skare'**
 who fact-dup-MsS/FsO-kiss-punc MsP-friend
 Who_i kissed his_i girlfriend?
- b) Uhka wa'-te-shako-noru'kwanyu-' **ako-skare'**
 who fact-dup-MsS/FsO-kiss-punc FsP-friend
 *Who_i did her_i boyfriend kiss?

The (a) example is grammatical in Mohawk (as it is in English). Example (b) is ungrammatical in English and should not be good in Mohawk, which also has overt wh-movement (Baker 1996); however, as seen above, it is perfectly good in Mohawk.

On the other hand, relative clauses examples are ungrammatical in both positions:

- 17.a) *Uhka wa'-t-huwa-noru'kwanyu-' **ne rukwe ne ruwa-nuhwe'-s**
 who fact-dup-FsS/MsO-kiss-punc NE man NE FsS/MsO-like-hab
 Who_i kissed the man she_i likes?

- b) *Uhka wa'-ti-shako-noru'kwanyu-' **ne rukwe ne shako-nuhwe'-s**
 who fact-dup-MsS/FsO-kiss-punc NE man NE MsS/FsO-like-hab
 *Who_i did the man who likes her_i kiss?

In Baker's analysis, the wh-word moves out of its argument position to Spec CP. If DPs were in A-positions, there should be a subject/object asymmetry as in English. However, the proposal that DPs are not in argument positions does not explain why WCO is absent with possessor phrases but always occurs with relative clauses. Baker proposes a parasitic gap analysis to capture the WCO facts for both possessive DPs and relative clauses.

6.2.1.2 Parasitic Gaps in Mohawk

Baker's (1996) account of WCO examples in Mohawk uses a parasitic gap analysis. Parasitic gaps (PG), as the term suggests, are gaps which are parasitic on existing operator-variable gaps (cf. Chomsky 1986, Williams 1988, for example). As a result, PGs can occur only in conjunction with operator constructions, for example, wh-questions and relative clauses. Within this context, they commonly occur in structures which involve coordination or some other type of linking word; for example:

(18.a) Who does Mary love t and want to marry PG?

- b) Who is the man [that Mary loves t] and wants to marry PG?
- c) Who does John want to marry t **because** he loves PG/her
- d) Poirot is a man [you distrust t] **when** you meet PG/him.
- e) Who did pictures **of** PG annoy t?

In (a) to (d), the clauses with the parasitic gap are adjoined or conjoined to the clause containing the wh-movement. The final example (e) contains a kind of possessor phrase.

Baker's analysis with parasitic gaps accounts for the difference between possessor NPs and relative clauses. The preceding discussion bears on the issue in two areas: First, in Mohawk, all overt lexical NPs are adjuncts. As shown in the examples in (18), adjunct clauses (and conjunct clauses) are typical extraction sites in a parasitic gap analyses. Secondly, the relevant adjuncts in the Mohawk examples include both possessor NPs and relative clauses associated with *pro* arguments of the verb. Of these two types of adjuncts, relative clauses are islands for parasitic gaps. Parasitic gaps involve movement, and movement cannot occur out of a relative clause without violating subadjacency. In this way, Baker uses subadjacency -- via the parasitic gap analysis -- to derive the CED effects which he obtains with complex relative clause DPs.¹²

Thus, possessive DPs, as seen in (16) above, show no contrast for WCO effects; both are grammatical, in contrast to the subject/object asymmetry found in English. The following example shows Baker's parasitic gap analysis of possessor DPs. In this analysis, the possessor is not a *pro*, but a parasitic gap, i.e., the trace of an empty operator. The movement of the "real" wh-operator in the clause is shadowed by the movement of an empty operator in the parasitic gap construction (based on the parasitic gap analysis of Chomsky (1982, 1986). The bracketted structure in (19.b) represents (16.b). In this structure, each operator -- the real one and the shadow one -- separately binds its variable in the IP and in

¹² CED violations are involved with extractions from adjunct clauses. In none of Baker's (1996) examples is the primary extraction from the adjunct phrase or clause. Rather the wh-movement is out of argument position of the verb while the "extraction" in the adjunct clause is secondary extraction of a null-operator, i.e., a parasitic gap. The purpose of the extraction is to obtain coindexation with an empty category (pronominal) in conjunction with the WCO configuration.

the adjoined DP respectively, circumventing a WCO configuration. This produces the grammatical interpretation in (a) in Mohawk.

- (19.a) Uhka wa'-te-shako-noru'kwanyu-' **ako-skare'**
Who_i did her_i boyfriend kiss?

- b) [CP who_i [IP [IP pro kiss t_i] [Op_i [NP PG_i friend]]]
|_____| |_____|

While the wh-operator A'-binds its trace in the clause, the shadow/empty operator A'-binds the empty position in the adjoined DP, and weak crossover is avoided in this possessive DP structure. The example in (16.a) with the complex DP associated with the object argument is analyzed in the same manner.

As seen in examples in (17) above, Baker shows that the Mohawk relative clause examples cannot have a bound reading. Both the subject and the object examples are ungrammatical in Mohawk. Consider the structure in (20), representing example (17.a).

- (20.a) *Uhka wa'-t-huwa-noru'kwanyu-' **ne rukwe ne ruwa-nuhwe'-s**
Who_i kissed the man she_i likes?

- b) [CP who_i [IP [IP t_i kiss pro] [Op_i [NP man [CP [IP PG_i likes him_k]]]]
|_____| |_*_*_*|

The ungrammaticality of the relative clause example is derived via the subjacency violation with the parasitic gap extraction. Baker (1996:82) describes the ungrammaticality of this structure as follows: "[PG_i] cannot be a parasitic gap, because it is not subjacent to a potential operator position with scope over NP_k. ... Neither can [PG_i] be a bound pronoun, because it is not c-commanded by the trace of the wh-phrase. [changes mine]"

The structure and the analysis is the same in (21), which represents (17.b). The following example is ungrammatical in Mohawk and in English:

- (21.a) *Uhka wa'-ti-shako-noru'kwanyu-' **ne rukwe ne shako-nuhwe'-s**
 *Who_i did the man who likes her_i kiss?

b) [CP who_i [IP [IP pro kiss t_i] [Op_i [NP man [CP [IP he likes PG_i]]]]]
 _____ | _____ * _____ *

Again, subjacency is violated by the null-operator movement out of the relative clause island. Thus, the parasitic gap analysis accounts for the ungrammaticality of both relative clause examples. The wh-movement in Baker's account provides the 'real' operator movement which is necessary for the parasitic gap analysis -- an analysis which provides Baker with an account of the absence of WCO in the possessive NP examples in (16) and the presence of WCO in the relative clause cases in (17).

Baker's analysis cannot be used for Nêhiyawêwin for two reasons; the first is empirical and the second is conceptual. Empirically, the evidence is different for Nêhiyawêwin, i.e., relative clause examples are grammatical. Compare the same sentence in Mohawk (22.a) and in Nêhiyawêwin (22.b). There are no WCO effects in Nêhiyawêwin when the offending pronoun is embedded in an object relative clause.

(22.a) **Mohawk:**

*Uhka wa'-t-huwa-noru'kwanyu-' [ne rukwe ne ruwa-nuhwe'-s]
 who fact-dup-FsS/MsO-kiss-punc NE man NE FsS/MsO-like-hab
 Who_i kissed the man she_i likes?

b) **Nêhiyawêwin:**

awîna kê-ocêm-â-t [anihi nâpêw-a kê-sâkih-â-t]
 who REL-kiss-dir-3 that(obv) man-obv REL-love-dir-3
 Who_i kissed the man she_i loves? J.388

Conceptually, I choose an analysis which can uniformly account for the absence of WCO in languages like English as well as Nêhiyawêwin and Mohawk as opposed to a

language-specific analysis as proposed for Mohawk in Baker (1996). In particular, I argue that it is the nature of the operator that is responsible for the absence of WCO. A non-quantificational operator does not trigger WCO, as evidenced in Nêhiyawêwin as well as in English (cf. Lasnik and Stowell 1991).

6.2.2 Weakest Crossover

Lasnik and Stowell argue that Weak Crossover occurs only with the movement of true quantifiers and wh-elements as shown in (23). In the Weak Crossover example in (a), the wh-movement is at S-structure. Example (b) has movement and WCO effects at LF.

(23) Weak Crossover:

- a) *Who_i does his_i son love t_i?
- b) S-structure: *His_i son loves everyone_i.
 *LF: [_{CP} Everyone_i [_{IP} his_i son loves t_i]]


The examples in (24) represent Weakest Crossover (Lasnik and Stowell 1991); in these examples, we will observe three properties:

- (i) These constructions involve movement of a null-operator rather than a quantificational wh-operator.
- (ii) A null-operator does not range over a set (as do quantificational operators); rather, its range is fixed via coindexation with an antecedent.
- (iii) The examples are grammatical and do not exhibit WCO. This concurs with the analysis of Lasnik and Stowell (1991) (hereafter, L&S) wherein the


absence of WCO in the following constructions in English is attributed to the nature of the null operator.

(24) **Weakest Crossover:**¹³ (Lasnik and Stowell 1991)

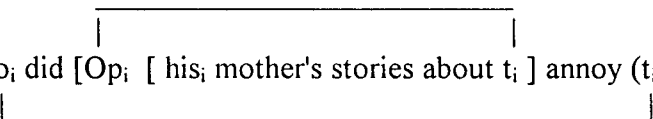
- a) Topicalization of a non-quantificational NP:

John_i [Op_i [I believe his_i mother loves t_i]]


- b) Focus/clefts:

It is this book_i [Op_i [that I got its_i author to read from t_i]]


- c) Parasitic gap:

Who_i did [Op_i [his_i mother's stories about t_i] annoy (t_i)]


In the (b) structure, the clefted constituent is base-generated in CP or a position adjoined to CP and is accompanied by null operator movement to Spec CP leaving an A'-trace in argument position. Topicalized element in (a) shows null-operator movement. Even though there is a gap (indicating movement), and there is a coindexed pronominal between the gap and the operator position, neither of these examples shows Weak Crossover effects.

The wh-movement in the main clause in (c) triggers a shadow (parasitic) movement in the possessor phrase. Within the possessor phrase, there is a coindexed pronominal between the gap and the operator position -- but there is no Weak Crossover violation.

¹³ The structures which provide evidence of Weakest Crossover include any environment which results from null-operator movement. L&S (1991) also show examples involving pseudo-clefts, tough movement, and restrictive relatives.

For these and other cases of "weakest crossover", L&S (1991) make the following descriptive generalization:

(25.a) WCO does not follow exclusively from the structural relation between the pronoun and the variable A'-bound by the same operator. WCO arises only in contexts where a pronoun is locally A'-bound at LF by a true quantifier ranging over a possibly non-singleton set.

b) Weakest Crossover: Null epithets do not trigger Weak Crossover effects.¹⁴

For Demirdache (1997:231), on the other hand, it is not the nature of the variable (i.e., whether it is a null epithet) which determines the absence of WCO. But rather, it is the nature of the relation between the variable and the anaphoric element to its left; WCO does not occur when this relation is one of Strict Coreference.

6.2.2.1 Demirdache (1997)

Demirdache's analysis is devoted to maintaining the status of WCO as a diagnostic for movement. Her analysis allows for both alternatives in any situation, i.e., the WCO interpretation and a Weakest Crossover interpretation. Demirdache supports L&S's (1991) claim that "there are no A'-binding configurations that are immune to WCO". It is simply that some situations offer an alternative solution.

Demirdache's analysis of L&S's (1991) English examples is based not on the status of the variable or on movement, but on the status of relations between the constituents involved.

When there is an anaphoric relation of strict coreference, then WCO effects can be

¹⁴ A trace of a non-quantificational operator is termed by L&S (1991) a *null epithet* -- which is the null counterpart of an anaphoric epithet like "the bastard" and "the idiot" (Demirdache (1997: note 18)).

circumvented. Strict coreference will occur in situations involving an empty operator and an anaphoric pronoun since, following Browning (1982) and Cinque (1990), Demirdache analyses null operator as *pro*.

Consider the sentence in (26.a) which involves a parasitic gap and does not trigger WCO. In order to see how the analysis works, consider only the bolded parasitic gap structure in (b) -- disregarding the actual wh-movement in the matrix clause. The key factor is the relationship between the Operator, the pronominal possessor in the NP and the trace and the operator. They are all coreferential pronominal forms whose relationship is one of strict coreference.¹⁵ Demirdache derives the analysis from Chomsky's (1992) copy theory of movement with the crucial assumption that the copy remains at LF until it is deleted.

(26.a) Who did his mother's stories about PG annoy?

b) Who_i did [Op_i [**his_i mother's stories about t_i**] annoy t_i]?

$\begin{array}{ccccc} | & & | & & | \\ \text{pro}_i & \text{pro}_i & & & \text{pro}_i \\ | & & & & | \\ \hline & & < \text{copy} & & \end{array}$

c) Who_i did [Op_i [**his_i mother's stories about t_i**] annoy?]

$\begin{array}{ccccc} | & & | & & | \\ \text{pro}_i & \text{pro}_i & & & t_i \\ *LF: & & & & \end{array}$

¹⁵ Demirdache (1997) analyzes a null operator as *pro* following Browning (1992). Demirdache (fn. 24.) states:

"For arguments that the empty category in parasitic gap constructions is *pro*, see also Cinque (1990) who analyses a parasitic gap as a *pro* A'-bound by a base-generated null-operator. Browning (1982) motivates her analysis as follows: All empty categories are subject to an identification requirement. When *pro* is not identified by a strong agreement, it has to move to an A'-position in order to be identified via a rule of predication that co-indexes it with an antecedent."

c) *LF: Op_i NP_i t_i

In the following examples from Hebrew, overt movement of the RP in (b) triggers WCO in relative clauses. The example in (a) without S-structure movement is grammatical. According to Demirdache's (1997) account, the (a) example has two possible configurations at LF, the ungrammatical WCO counterpart of (b) and the licit Weakest Crossover alternative as discussed in conjunction with the examples above.

(31.a) ha-'iš še 'im-o; 'ohevet 'oto;
 the-man that mother-his loves him
 *'the man that his mother loves him.'

b) * ha-'iš oto; 'im-o; 'ohevet t;
 the-man him mother-his loves
 *'the man that his mother loves him.'

The examples above show how Demirdache's analysis works for Semitic languages.

6.2.3 Evidence for Nêhiyawêwin

Baker (1996) uses a parasitic gap analysis to account for the evidence involved with complex NPs in Mohawk wh-questions. We saw above that the Nêhiyawêwin evidence for relative clauses is different. We will look at Nêhiyawêwin examples with possessive phrases and relative clauses. Recall that the wh-word is in the nominal wh-clause and there is null operator movement in the verbal clause.

6.2.3.1 Possessive DPs

There is no evidence for Weak Crossover in conjunction with Nêhiyawêwin possessor phrases -- the subject and object examples are both grammatical.

(32.a) awîna kê-nawaswât-â-t o-têm-a 3 → 3' (direct)
 who rel-chase-dir-3 3-dog-obv
 Who_i is chasing his_i (own) dog?

b) awîna o-têm-a kê-nawaswât-iko-t¹⁶ 3' → 3 (inverse)
 who 3-dog-obv rel-chase-inv-3'>3
 *Who_i is his_i dog chasing? B.152.a

The example in (32.b) is represented as in (33).

(33.a) awîna [-- [o - têm-a [kê-nawaswât-iko-t]]]

b) COPY: Who_i is [*pro*_i [*pro*_i - dog_k [*pro*_k chasing *pro*_i]]]
 ↑ _____ |

c) *LF=WCO Who_i [**Op**_i COMP [*pro*_i - dog_k [*pro*_k chasing *t*_i]]]
 | | |
 Op_i *pro*_i *t*_i

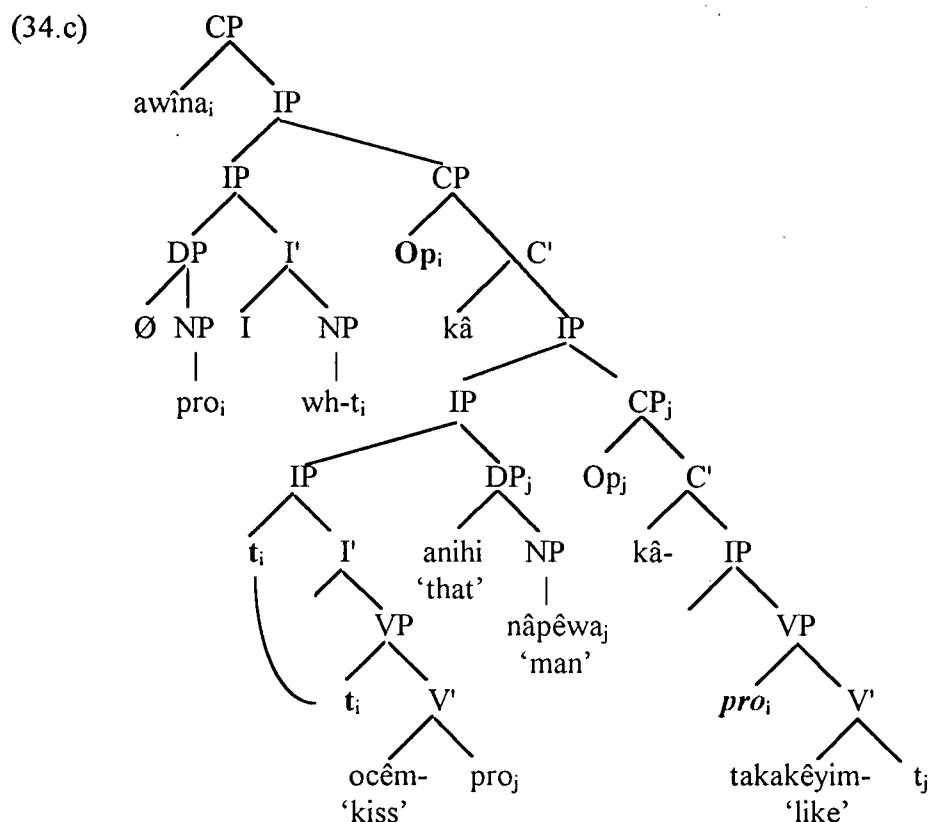
d) ✓LF Who_i [**Op**_i COMP [*t*_i - dog_k [*pro*_k chasing *pro*_i]]]
 | | |
 Op_i *t*_i *pro*_i

According to the Weakest Crossover analysis outlined above, the pronominal argument is copied as shown in (b). The copy in operator position and its original in object position of the clause remain at LF where there is now a string of three identical *pro*_i constituents. This creates a situation of strict coreference with three identical and coindexed *pro* constituents

¹⁶ In Nêhiyawêwin, the verb morphology can specify the coreference relationship. The following example forms a pair with (32.b) above which together represent the two possibilities:

- (i) awîna o-têm-a kê-nawaswât-â-yi-t
 who 3-dog-obv rel-chase-dir-obv-3 3' → 3''
 Who_i is his_j dog chasing *t*_i?
 Whose_i dog is chasing him_j? (alt. Eng. gloss)

The inverse direction on the verb in (32.b) (3' → 3) designates the proximate argument (i.e., the dog's owner) as the person being chased. In the (i) example, the morphology is direct and means that the object argument is someone other than the dog's owner.



Note that the operator movement of the matrix subject leaves a trace in Spec IP where the subject picks up Case. The *pro*_i in the IP-adjoined relative clause can be interpreted as a variable bound by the trace in Spec IP once we define binding in terms of “exclusion” rather than c-command. Under the exclusion version of binding, *t*_i binds *pro* because the first node dominating *t*_i (IP) does not exclude *pro* since there is a segment of IP which dominates *pro*.^{17 18} In sum, there are no WCO effects with the configuration in (35).

(35) LF: Op_i t_i pro_i

¹⁷ A excludes B iff no segment of A dominates B.

¹⁸ The same c-command possibilities are not available for operator movement out of object position (i.e., the VP dominates the object trace and excludes *pro*). This would predict that there is subject/object asymmetry in Nêhiyawêwin for extraction from adjoined relative clause NPs as (36.a) illustrates. However, we shall see that this WCO violation can be circumvented as (36.b) illustrates.

The null Operator of the matrix relative clause locally binds its own trace. The *pro_i* in the IP-adjoined relative clause is bound by the trace as shown in (35) and is coindexed with the operator-variable chain.

6.2.3.2.1 Relative Clauses Associated with Subject

When the relative clause is associated with the subject, the situation is not so straightforward. Consider the following examples.¹⁹

- (36.a) *awînihi **nâpew** **kâ-sâkih-â-t** kâ-ocêm-â-t
 who (obv) man rel-love-dir-3 rel-kiss-dir-3
 *Who_i did [the man who loves her_i] kiss? D.256

- b) awîna ana **ana nâpew** **kâ-sâkih-â-t** kâ-ocêm-â-t
 Who that that man rel-love-dir-3 rel-kiss-dir-3
 "Who is it that the man loves and kisses?" MA.372

The bolded relative clause in both cases precedes the matrix verb.²⁰ Both sentences were composed by myself with the intention that the bolded relative clause represents the subject of the main verb. Otherwise, the two verbs both have *kâ-* complementizer and are the same in every way. Yet the two structures are quite different as shown in (37) and (38.a).

Note that, though the glosses are different, they convey the same information, i.e., the man loves her and he is kissing her. In (37), the sentence -- as presented and glossed by me -- was rejected by the speaker as ungrammatical. In my gloss, I had in effect imposed the WCO

¹⁹ The form of the wh-phrase does not, to my knowledge, affect or determine the gloss provided.

²⁰ As in Mohawk, the relative may precede or follow the verb without altering the grammaticality judgements. In fact, the preferred word order for relative clauses in wh-questions is following the verb.

Why is the Weakest Crossover interpretation not available? With *nâpêwa* 'man (obv)' as head of the relative clause as shown, the Weakest Crossover configuration as shown in (41) is not possible because the null-operator movement out of the relative clause violates subjacency constraints [*]. This is illustrated in the tree in (41.b).²²

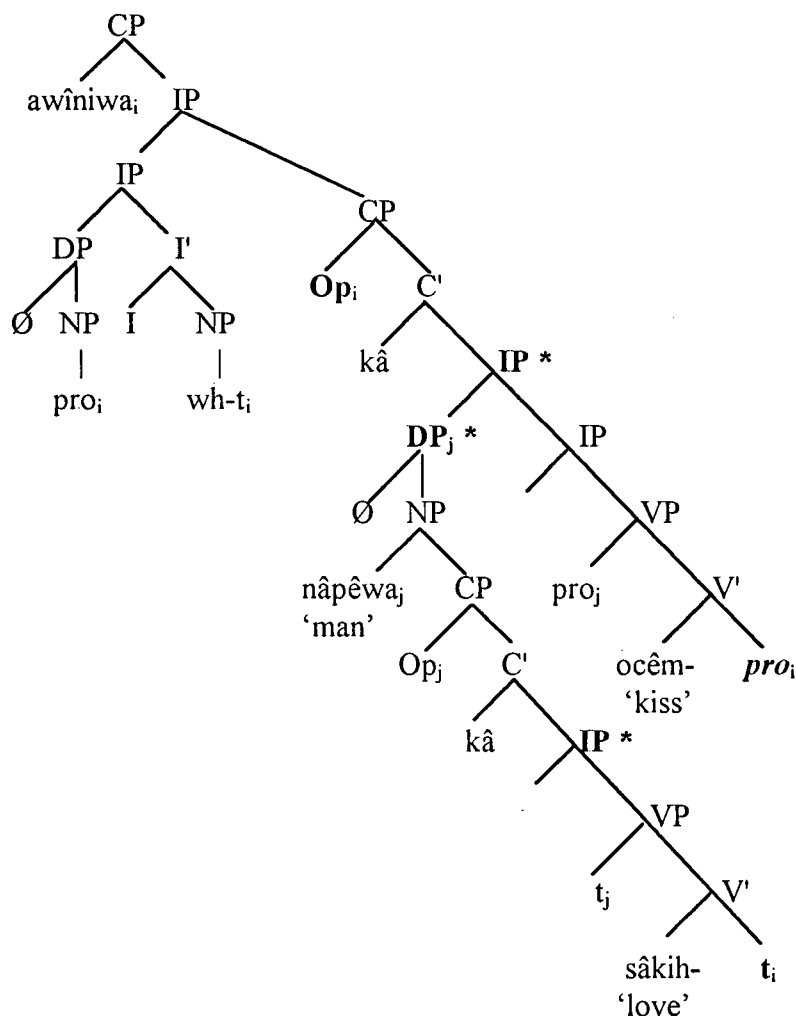
(41.a) [Who_i [*pro*_i t_i] [Op_i [IP [DP the man_j [Op_j [t_j loves her_i] kiss t_i]]]]]

*LF=Subjacency



The chain (Op_i t_i) is not licit because movement has crossed three bounding nodes.

(41.b)



²² This is similar to Baker's (1996) parasitic gap analysis for Mohawk.

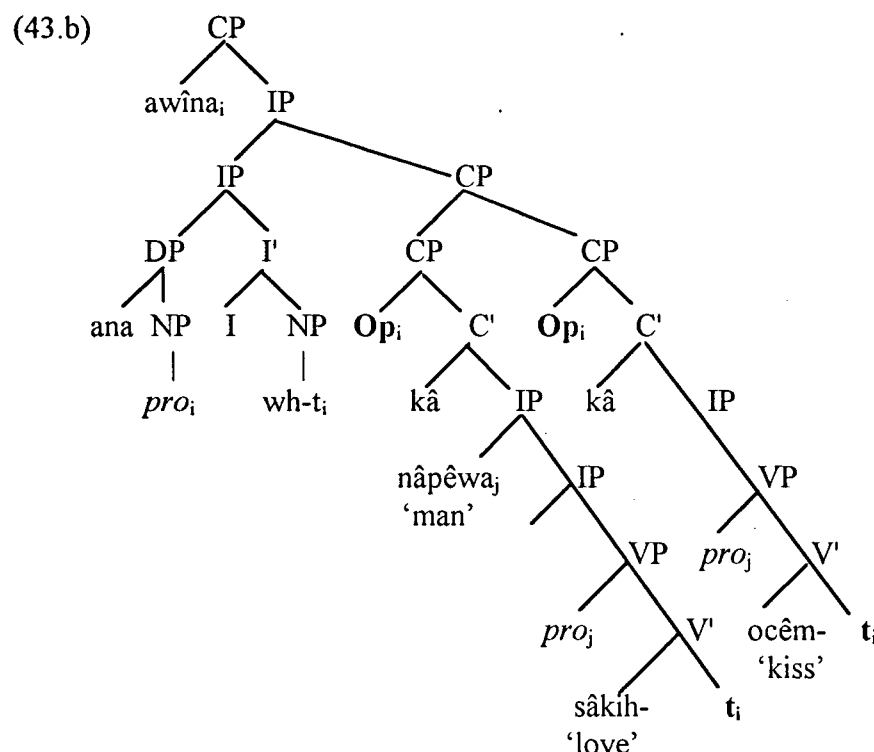
Neither option -- the WCO interpretation nor the the Weakest Crossover interpretation which yields a subjacency violation -- is licit. Now we will consider the licit structure in (38) which bypasses WCO.

The (36.b) example (repeated here as (42)) represents the licit interpretation.

- (42) awîna ana ana nâpew kê-sâkih-â-t kê-ocêm-â-t
 Who that that man REL-love-dir-3 REL-kiss-dir-3
 "Who is it that the man loves and kisses?" MA.372²³

The licit gloss for this sentence was provided by the speaker (Mary Ann). The configuration shown in (43.a) is represented in the tree structure shown in (43.b):

- (43.a) [Who_i [*pro*_i [Op_i [_{IP} the man_j loves t_i]] & [Op_i [_{IP} *pro*_j kisses t_i]]]]]



²³ Similarly, two relative clauses conjoined in a narrative context:

- (i) êkoni anihi kîkway [kîkwêy] mistahi kê-mâyi-tôtâ-ko-yahk kê-pîkon-iko-yahk; ...
 these those thing(s) greatly rel-bad-do to s.o.-inv-1pl rel-break-inv-1pl
 "These are the things that greatly hurt us and break us; ..." (Wolfart & Ahenakew 1993:74).

When the gloss of the given Nêhiyawêwin sentence is left to the interpretation of the speaker, the licit structure shown above emerges. In this structure there are two parallel relative clauses (both clauses have *kâ-* complementizer) each with the same obviative referent extracted via the null-operator movements. The coordination of two relative clauses provides an ATB (across-the-board) parasitic gap structure like that discussed in Williams (1988). However, Chomsky-style, there are two separate A'-chains. In Williams (1988) ATB parasitic gap structure, a single (overt) operator creates a gap in two parallel (conjoined) structures, i.e., an single headed operator chain with two variable chains. Chomsky (1986) maintains two separate and independent structures, the original A'-chain with an overt head and the parasitic A'-chain with a null head.

6.3 Comments

In this chapter we have seen that there is clear contrast between long-distance extraction from embedded complement clauses and the absence of extractions from adjunct islands. These contrasts provide evidence that complement clauses are in argument position. I have established, further, that extraction from within wh-islands is ungrammatical. This fact provides strong support for the analysis of wh-questions defended in Chapter 5. In particular, both extraction from adjunct clauses and extraction from wh-islands are ruled out as CED violations (Huang 1982).²⁴ On the other hand, we have seen that there are strategies

²⁴ More research is required with other types of adjuncts. The evidence available is from data gathered some years ago and there are gaps in the paradigm.

We then looked at the Weak Crossover evidence with complex NPs including relative clauses. Baker's (1996) parasitic gap analysis for complex DPs cannot be applied to Nêhiyawêwin because it incorrectly predicts that all relative clause examples will be bad. In fact, the opposite is true.

I have proposed an alternative analysis to account for the absence of WCO effects in both possessor DPs and relative clauses. I have reanalyzed the absence of WCO in Nêhiyawêwin as an instance of Weakest Crossover. This is a phenomenon found in a wide range of languages including English (Lasnik and Stowell 1991) which occurs whenever movement of a non-quantificational operator gives rise to conditions of strict coreference in a string of pronominal elements. I have shown that this analysis accounts for the possessive DP examples. Moreover, it explains why object-related relatives never involve WCO while subject-related relatives contrast for good and bad interpretations (though both have the same meaning). In other words, these Nêhiyawêwin sentences are structurally ambiguous. Using the same surface string, one structure triggers WCO but the other structure does not.²⁵

²⁵ There are a number of variations (i.e., involving different combinations of complementizers) for which I have only partial paradigms and which require further investigation. The evidence presently shows that these examples, too, provide both good and bad interpretations (and structures).

Chapter 7

CONCLUSIONS

7.0 Conclusions

I have investigated and provided an analysis for the structure of Nêhiyawêwin wh-questions. I have proposed that wh-words are not generated in argument position of a verb. Rather, the wh-phrase occurs as the predicate NP in a separate nominal clause structure. The subject of the nominal clause is linked to an A-position in a subordinate clause in one of two ways, either via clefting of the wh-phrase or by conjunction. When the subordinate clause has *kâ*- complementizer, the resulting structure is a relative clause which restricts the reference of the subject, i.e., *Who is that/the [one that Mary likes?]*. When the subordinate clause has *ê*- complementizer, the clauses are interpreted as conjoined, i.e., *Who is he_i & Mary likes him_i*.

Wh-questions require movement, and I have argued that movement of a null operator occurs in all Nêhiyawêwin wh-questions. The choice of complementizer determines not only the structure of the wh-question, but also the level of the syntax at which operator movement takes place. With complementizer *kâ*-, there is movement at S-structure. When the complementizer is *ê*-, there is LF operator movement in the subordinate clause -- which forces the anaphoric relation between the wh-word and an argument in the conjoined clause.

This investigation of wh-questions has also provided an account of nominal clause structures in Nêhiyawêwin. In my analysis, obligatory predicate fronting accounts for the proximate/obviative agreement between the subject and predicate DPs -- as well as for the obligatory initial position of the wh-word. We have seen, further, that there is a contrast between complement clauses and adjuncts with respect to long-distance null-operator movement. Complement clauses allow long-distance extraction while adjunct clauses do not allow extraction, in accordance with Huang's (1982) Constraint on Extraction Domains. Based on these asymmetries, I propose that complement clauses are in argument positions in Nêhiyawêwin. I have argued, further, that the ungrammaticality of extraction of wh-clauses in complement position provides strong support for the analysis of wh-questions defended here; i.e., that both extraction from adjunct clauses and extraction from within wh-islands can be uniformly ruled out as CED effects.

With respect to null-operator movement, I also argue that WCO may be avoided because there is no movement of a truly quantificational operator. Nêhiyawêwin wh-questions are immune to WCO in the same way as null-operator structures in English (i.e., parasitic gaps) are immune to WCO (see Lasnik and Stowell 1991). My analysis is based, in particular, on Demirdache's (1997) analysis of Weakest Crossover.

In addition, in Chapter 2, I have used an analysis based on hierarchies to provide an account of the direct/inverse system characteristic of Algonquian languages. The treatment of the data via a system of hierarchies and the alignment of those hierarchies

provides insights into the issue of inverse vs. passive which have not been available previously.

During the course of this work, I have suggested areas which require further research. One area which invites investigation involves the question of (i) why NPs are prohibited from appearing in A-position; and (ii) whether they are base generated in A' position or scrambled out of an A-position into an A'-position. In other words, is Nêhiyawêwin a Pronominal Argument Language (PAL)?

I expect that this PAL issue will revolve around the fact that Nêhiyawêwin has no regular determiner system -- other than the deictic set discussed in Chapter 3. As noted in Chapter 4, overt DPs occur in subject position of the nominal clauses (i.e., non-verbal clauses which have no verbal-agreement morphology to identify pronominal arguments); and we have observed that speakers almost invariably supply a deictic determiner for these arguments. What are the semantics and syntax of the NP/DP distinction? Many of the questions arising out of this investigation of wh-constructions hinge on these issues.

We have seen that there are two forms for the obviative wh-word *awîni-wa* vs. *awîni-hi* 'who'. The standard (more conservative) form of the suffix is *-hi* which categorizes wh-words along with other sets in the pronominal paradigms. The *-wa* suffix typically occurs on nouns. What is the significance of this shift and how does it affect wh-strategies, if at all? I have observed a number of other sub-dialectal differences which are set down in (1), i.e., the dialects with *-wa* tend to use *ê-* complementizer more than *kâ-* -- as well as using the independent mode of the verb more freely. Are these issues

related? Also, What is the significance of the variation across dialects and across speakers as shown in the table in (1)?

(1) Wh-question Patterns:

Eastern Cree	Nêhiyawêwin	
	Dialect I: awîni-hi	Dialect II: awîni-wa
* kê-	kâ-	kâ-
ê-	↓ ê-	↑ ê-
	↓ Ind	↑ Ind

I have suggested in Chapter 3 that the absence of *kâ-* (in all but past tense) in Moose Cree wh-questions, for example, is related to the issue of Initial Change (or IC, a morphophonological ablauting process). Moose Cree, like the neighbouring Ojibwa language, appears to have retained the more overt expression of the IC process. The IC process is used as a focussing device and is, in fact, represented in the *ê-* conjunct/complementizer. By contrast, the *ê-* complementizer is absent from ordinary complement clauses in Moose Cree. I propose that Nêhiyawêwin has grammaticalized the process in the form of *kâ-* and *ê-* complementizers which is not tense-related (see discussion in Appendix D). However, this proposal requires further research.

There is also the issue of argument-type wh-words, i.e., those corresponding to *who* and *what* -- as opposed to adverbial wh-words like *why* and *when*. It is possible that,

since the adverbial wh-words are not associated with an argument position, they may be generated inside the verbal clause and move to Spec CP in Nêhiyawêwin as they do in English. This would contrast with wh-words associated with argument positions, which are generated in a separate nominal clause in my analysis. This contrast exists with Egyptian Arabic wh-expressions (Demirdache p.c.). However, I have not investigated the issue and this needs to be done.

These are all issues which have been brought to light in the course of my investigation of Nêhiyawêwin wh-constructions.

This analysis of Nêhiyawêwin wh-constructions is presented within the framework of generative grammar. As such, it provides a significant contribution to this growing body of Algonquian literature in this framework -- as well as to the theoretical literature on wh-constructions and the structure of Native American languages in general.

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APPENDIX A

INFLECTIONAL PARADIGMS

VII Intransitive Inanimate (subj) Stem: mihkwâ- 'be red'

	Independent	Conjunct
inan.sg.	mihkw-â-w	ê-mihkw-â-k
inan.pl	mihkw-â-w-a	ê-mihkw-â-k-i
inan.obv.sg	mihkw-â-yi-w	ê-mihkw-â-yi-k
inan.obv.pl	mihkw-â-yi-w-a	ê-mihkw-â-yi-k-i

VAI Intransitive Animate (subj) Stem: pimipahtâ- 'run'

	Independent	Conjunct
1	ni-pimipaht-â-n	ê-pimipaht-â-yân
2	ki-pimipaht-â-n	ê-pimipaht-â-yan
1.pl.excl.	ni-pimipaht-â-nân	ê-pimipaht-â-yâhk
21.pl.incl.	ki-pimipaht-â-(nâ)naw	ê-pimipaht-â-yahk
2.pl	ki-pimipaht-â-(nâ)waw	ê-pimipaht-â-yêk
3	pimipaht-â-w	ê-pimipaht-â-t
3pl	pimipaht-â-w-ak	ê-pimipaht-â-c-ik
3'(obv)	pimipaht-â-yi-w-a	ê-pimipaht-â-yi-k

VTI Transitive Inanimate (obv) Stem: wâpaht- 'see (something)'

	Independent	Conjunct
1	ni-wâpaht-ê-n	ê-wâpaht-am-ân
2	ki-wâpaht-ê-n	ê-wâpaht-am-an
1.pl.excl.	ni-wâpaht-ê-nân	ê-wâpaht-am-âhk
21.pl.incl.	ki-wâpaht-ê-(nâ)naw	ê-wâpaht-am-ahk
2.pl	ki-wâpaht-ê-(nâ)waw	ê-wâpaht-am-êk
3	wâpaht-am-(w)	ê-wâpaht-ahk
3pl	wâpaht-am-w-ak	ê-wâpaht-ahk-ik
3'(obv)	wâpaht-am-iyi-w-a	ê-wâpaht-am-iyi-k

Theme Markers:

Vb.class I: -ê-1/2 subj(Ind)
-am- elsewh.

Vb. class II: -â-
III: -ø-

VTA Transitive Animate (obj): DIRECT Paradigm

Stem: sêkih- 'to frighten (someone)'

subj-- > obj	Independent	Conjunct
2-1	ki-sêkih-i-n (2/1sg)	ê-sêkih-i-yan
2pl-1	ki-sêkih-i-nâwaw	ê-sêkih-iy-êk
2(pl)-1pl.ex	ki-sêkih-i-nân	ê-sêkih-iy-âhk
1-3	ni-sêkih-â-w	ê-sêkih-ak (portmant)
1-3pl	ni-sêkih-â-w-ak	ê-sêkih-ak-ik
1-obv	ni-sêkih-im-â-w-a	ê-sêkih-im-ak
2-3	ki-sêkih-â-w	ê-sêkih-at (portmant)
2-3pl	ki-sêkih-â-w-ak	ê-sêkih-a-c-ik
2-obv	ki-sêkih-im-â-w-a	ê-sêkih-im-at
1pl.ex-3	ni-sêkih-â-nân	ê-sêkih-â-yâhk
1pl.ex-3pl	ni-sêkih-â-nânak	ê-sêkih-â-yâhk-ik
1pl.ex-obv	ni-sêkih-im-â-nân-a	ê-sêkih-im-âhk
21pl.in-3	ki-sêkih-â-naw	ê-sêkih-â-yahk
21pl.in-3pl	ki-sêkih-â-nawak	ê-sêkih-â-yahk-ok
21pl.in-obv	ki-sêkih-im-â-naw-a	ê-sêkih-im-â-yahk
2pl-3	ki-sêkih-â-wâw	ê-sêkih-â-yêk
2pl-3pl	ki-sêkih-â-wâwak	ê-sêkih-â-yêk-ok
2pl-obv	ki-sêkih-im-â-wâw-a	ê-sêkih-im-â-yêk
3-obv	sêkih-ê-w	ê-sêkih-â-t
3pl-obv	sêkih-ê-w-ak	ê-sêkih-â-c-ik
obv-obv	sêkih-ê-yi-w-a	ê-sêkih-â-yi-t
(further obviative)		
3-obv'	sêkih-im-ê-w	ê-sêkih-im-â-t
3pl-obv'	sêkih-im-ê-w-ak	ê-sêkih-im-â-c-ik

VTa Transitive Animate (obj): INVERSE Paradigm

(Stem: sêkih- 'frighten s.o.')

Subj-- > obv	Independent	Conjunct
1-2	ki-sêkih-iti-n	ê-sêkih-it-ân
1-2pl	ki-sêkih-iti-nâwâw	ê-sêkih-it-ak-ok (port)
1pl.ex-2(pl)	ki-sêkih-iti-nân	ê-sêkih-it-âhk
3-1	ni-sêkih-ik	ê-sêkih-it (port)
3pl-1	ni-sêkih-ik-w-ak	ê-sêkih-ic-ik
obv-1	ni-sêkih-iko-yi-w-a	ê-sêkih-iyi-t (port)
inan-1	ni-sêkih-iko-n	ê-sêkih-iko-yân
3-2	ki-sêkih-ik	ê-sêkih-isk (port)
3pl-2	ki-sêkih-ik-w-ak	ê-sêkih-isk-ik
obv-2	ki-sêkih-iko-yi-w-a	ê-sêkih-iy-isk (port)
inan-2	ki-sêkih-iko-n	ê-sêkih-iko-yan
3-1pl.ex	ni-sêkih-iko-nân	ê-sêkih-iko-yâhk
3pl-1pl.ex	ni-sêkih-iko-nân-ak	ê-sêkih-iko-yâhk-ik
obv-1pl.ex	ni-sêkih-iko-nân-a	ê-sêkih-iko-wâ-yâhk
inan-1pl.ex	ni-sêkih-iko-nânaw	ê-sêkih-iko-yâhk
3-21pl.in	ki-sêkih-iko-naw	ê-sêkih-iko-yahk
3pl-21pl.in	ki-sêkih-iko-naw-ak	ê-sêkih-iko-yahk-ok
obv-21pl.in	ki-sêkih-iko-naw-a	ê-sêkih-iko-wâ-yahk
inan-21pl.in	ki-sêkih-iko-nânaw	ê-sêkih-iko-yahk
3-2pl	ki-sêkih-iko-wâw	ê-sêkih-iko-yêk
3pl-2pl	ki-sêkih-iko-wâw-ak	ê-sêkih-iko-yêk-ok
obv-2pl	ki-sêkih-iko-wâw-a	ê-sêkih-iko-wâ-yêk
inan-2pl	ki-sêkih-iko-nâwâw	ê-sêkih-iko-yêk
obv-3	sêkih-ik(o-w)	ê-sêkih-iko-t
obv-3pl	sêkih-ik-w-ak	ê-sêkih-iko-c-ik
obv-obv	sêkih-iko-yi-w-a	ê-sêkih-iko-yi-t
inan-3	sêkih-iko-w /(ow)	ê-sêkih-iko-t
inan-3pl	sêkih-iko-w-ak	ê-sêkih-iko-t-ik

Paradigm: Passive Stem: sêkih 'frighten'

	Independent	Conjunct
1	ni-sêkih-ikawi-n	ê-sêkih-ikawi-yân
2	ki-sêkih-ikawi-n	ê-sêkih-ikawi-yan
1pl.ex	ni-sêkih-ikawi-nân	ê-sêkih-ikawi-yâhk
1pl.in	ki-sêkih-ikawi-nânaw	ê-sêkih-ikawi-yahk
2pl	ki-sêkih-ikawi-nâwâw	ê-sêkih-ikawi-yêk
3	sêkih-â-w	ê-sêkih-iht
3pl	sêkih-â-w-ak	ê-sêkih-ihc-ik
obv	sêkih-im-â-w-a	ê-sêkih-im-iht

Indefinite Subject (AI, TI Stem: pimipahtâ 'run')

pimipahtâ-niniw ê-pimipahtâ-hk

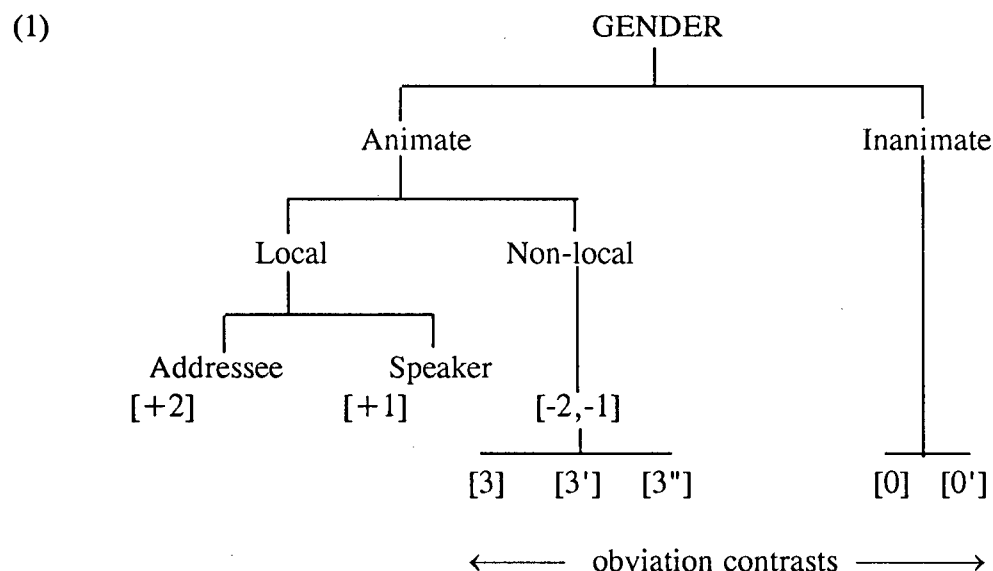
APPENDIX B

NUMBER AND GENDER

1.0 Proximate/obviative & Gender in Nêhiyawêwin

Overt NPs are classified according to animate vs inanimate gender. Animate nouns include all humans and animals, and also some items which are typically inanimate in English; for example, *kôn-* 'snow', *otâpânâskw-* 'vehicle', *ospwâkan-* 'pipe', *kâwiy-* 'porcupine quill', and *sôniyâw-* 'money'. (See glossary in Ahenakew (1987.a) for more examples.)

Déchaine (1996) (based on Hockett 1966) proposes the following schema for the Number-gender system of Nêhiyawêwin (reproduced here from above):



The proximate/obviative contrast occurs only in conjunction with third-person -- animate or inanimate. Within that category, there is a further breakdown with respect to animate vs inanimate lexical NPs and personal pronouns; and between nominal inflection and verbal inflection. Consider the following:

(2)	Nominal Agreement Verbal Agreement	
(i) Animate NPs	prox/obv	prox/obv
(ii) Inanimate NPs	n/a	prox/obv
(iii) Personal pronouns	n/a	prox/obv

The proximate/obviative contrast is marked in the agreement morphology on the verb in all three cases. This marking is obligatory with TA (transitive animate) verbs in particular, but typically occurs on other verbs also.

With respect to nominal agreement, we will look at paradigms in the three categories in (2).

(i) **Animate NPs**

The proximate/obviative contrast is illustrated in the NPs in (3); simple NPs and names are shown with obviative being marked by suffix *-(w)a*. The third column shows the plural forms of the common nouns; you will note that plural does not distinguish between proximate and obviative:

(3)	3 (prox)	3' (obv)	3pl
	Mary	Mary-wa	--
	'man' nâpêw nâpêw-a		nâpêw-ak
	'duck' sîsîp	sîsîp-a	sîsîp-ak
	'pipe' ospwâkan	ospwâkan-a	ospwâkan-ak
	John	John-a	

A common noun NP may take either (but not both) of the suffixes. Possessed NPs are illustrated in (4). In possessor NPs, the status of the animate possessor is always indicated while the obviative status of the possessee is marked only if the possessee is animate gender.

(4) Possessive NPs (Animate): Prox/obv (Wolfart 1973:31)

3 (prox)		3' (obv)	
ni-têm	my horse	ni-têm-a	my horse(s)
ki-têm	your horse	ki-têm-a	your horse(s)
---		o-têm-a	his (3) horse(s)
---		o-têm-iyiw-a	his (3') horse(s)
ni-têm-inân	our horse	ni-têm-inân-a	our horse(s)
ki-têm-inaw	our(2.1) horse	ki-têm-inaw-a	our(2.1) horse(s)
ki-têm-iwâw	your (pl) horse	ki-têm-iwâw	your(pl) horse(s)
---		o-têm-iwâw-a	their horse(s)

The third-person possessor is proximate while the possessee is obviative; and again, the obviative examples are not marked for plural as shown in (5).

(5) Possessive NPs (Animate): Sing/plur (Wolfart 1973:31)

3sg		3pl	
ni-têm	my horse	ni-têm-ak	my horses
ki-têm	your horse	ki-têm-ak	your horses
o-têm-a	his (3) horse(s)	---	
o-têm-iyiw-a	his (3') horse(s)	---	
ni-têm-inân	our horse	ni-têm-inân-ak	our horses
ki-têm-inaw	our (2.1) horse	ki-têm-inaw	our (2.1) horses
ki-têm-iwâw	your (pl) horse	ki-têm-iwâw	your (pl) horses
o-têm-iwâw-a	their horse(s)	----	

Either suffix may occur on the stem; but when the possessor is third-person, only the obviative suffix may be used regardless of whether there is one horse or more than one.

(ii) Inanimate NPs

Inanimate nouns, on the other hand are marked only for singular and plural. Contrast the examples for my shoe/shoes and his shoe/shoes, for example:

(6) Possessive NPs (Inanimate): Sing/plur (Wolfart 1973:31)

0sg		0pl	
ni-maskisin	'my shoe'	ni-maskisin-a	'my shoes'
ki-maskisin	'your shoe'	ki-maskisin-a	'your shoes'
o-maskisin	'his.3 shoe'	o-maskisin-a	'his.3 shoes'
o-maskisin-iyiw	'his.3' shoe'	o-maskisin-iyiw-a	'his.3' shoes'
ni-maskisin-inân	'our shoe'	ni-maskisin-inân-a	'our shoes'
ki-maskisin-inaw	'our.2/1 shoe'	ki-maskisin-inaw-a	'our.2/1 shoes'
ki-maskisin-iwâw	'your shoe'	ki-maskisin-iwâw	'your shoes'
o-maskisin-iwâw	'their shoe'	o-maskisin-iwâw-a	'their shoes'

Note that the plural marker for inanimate NPs is homophonous with the obviative marker for animate NPs as seen in (4) above.

The following example (7) illustrates the absence of obviative marking on inanimate NPs.¹ The *-iyiw* suffix on the noun represents the obviative status of the possessor (see paradigm in (6)).

- (7) Mary ê-otin-am-k o-wiyâs-iyiw
 Mary conj-take-th-3 3-meat-(3')poss
 Mary took his meat. B.862

On the other hand, as noted by Wolfart (1973:29), the obviative status of the NP is retained on the verb in (8).

- (8) ê-wanit-â-t kâ-mihkwê-yi-k o-pakiwayân
 conj-lose-th-3 rel-be red-obv-3 3-shirt
 He lost his red shirt. J.622

¹ It should be noted that some Algonquian languages do show the proximate/obviative contrast on inanimate NPs, i.e., in some dialects of Ojibwa, the obviative suffix *-ini* occurs on inanimate nouns (Grafstein 1984).

(iii) Personal Pronouns: Sing/plur

As indicated above, inanimate NPs and all overt pronominal NPs contrast only for singular and plural. The complete list of personal pronouns is as follows:

(9) Personal Pronouns

	<u>Singular</u>	<u>Plural</u>
1st.	niya	niyanân (1pl.exclusive) kiyanaw (2.1 inclusive)
2nd.	kiya	kiyawâw
3rd.	wiya	wiyawâw

Except for the 2.1 inclusive plural, all three persons show only singular/plural contrast. First- and second-person (and the plural) forms typically occur in emphatic contexts and also in conjunction with another NP in a compound NP. However, this does not appear to be the case with singular third-person *wiya*. The absence of a 3-obviative form, for one thing, means that the distinction is lost between two different third-persons in a sentence or discourse.²

² Cf. Frantz (1991) with regard to personal pronouns in Blackfoot. In that Algonquian language, first- and second-person pronouns show proximate/obviative contrast while the third-person pronoun has only the obviative form (see Déchaine (1996)).

APPENDIX C

CONJUNCT VS. INDEPENDENT

Verbs occurs in either the Conjunct Mode or the Independent Mode -- the two major paradigms of verbal inflection discussed in this work.

The conjunct paradigm appears to be the form most commonly used -- both in elicited sentences and in a narrative or story-telling context. The conjunct mode may occur in both main clauses and in subordinate clauses.

There are two conjunct markers (complementizers): *ê-* and *kâ-*. We have seen that *kâ-* is syntactically motivated while *ê-* is the "unmarked" conjunct.

The Independent paradigm may occur only in the main clause of a sentence.³ However, the use of Conjunct vs. Independent forms in a matrix clause is not clearly defined along syntactic lines.

There appear to be some semantic and/or discourse related issues involved. In the context of elicited sentences, the use of independent forms in matrix clauses is optional. Elicited sentences may be interpreted as "out of the blue" sentences, i.e., they have no discourse context. As such, some speakers use the independent form more liberally in this context than do other speakers. When independent forms do occur, it is often in conjunction with sentences involving first- or second-person arguments.⁴

³ Historically, the Independent paradigm is a more recent development -- and originally was used to represent subordinate clauses (Richard Rhodes, p.c.). Note that the inflectional morphology in the Independent Mode mimics that found in possessor phrases. Further evidence exists with negation particles: the same form used to negate NPs, i.e., *namôya* 'not', is typically used with the Independent Mode verbs while Conjunct Mode verbs have a separate form, *êka* 'did not'.

⁴ In a textual/narrative context, the Independent mode is typically used with background sentences. In other words, with sentences which do not advance the story line but which rather provide information added by the story teller to explain or clarify some issue or perhaps to express a personal opinion on the content of the story. The foregrounded story is typically (though not exclusively) rendered in the conjunct mode.

The following example illustrates these possibilities:

	Main Clause	Subordinate Clause
Independent	✓	--
Conjunct \hat{e} -	✓	✓

The main clause/subordinate clause distinction is clearly not the only component involved with the two paradigms.

APPENDIX D

COMPLEMENTIZERS

kâ- : Complementizer or Past Tense

D. James (p.c.) points out that, in Moose Cree wh-questions, *kâ-* means 'past tense' and is not used in present and future tense questions. Blain (1996) discusses the issue of *kâ-* in wh-questions contrasting a dialect of Ojibwa (Johns 1982) with Moose Cree (James 1991) and Nêhiyawêwin (Plains Cree). The evidence for wh-questions is shown in (1):

(1) Wh-Questions

	Ojibwa	Moose Cree	Nêhiyawêwin (Plains Cree)	
			Independent	Conjunct
PRESENT: Initial Change (IC)		ê- / IC	--	ê- = COMP kâ- = COMP
PAST:	kâ7- kî7 + IC 'past'	kâ- kî + IC 'past'	kêh- ⁵ kîh + IC 'past'	ê-(kîh-) kâ-(kîh-) COMP + ('past')
FUTURE	wâ7- wî7 + IC 'fut'	kê- ka + IC 'fut'	wêh- wîh + IC 'fut'	kâ-wîh- COMP + 'fut'

⁵ These Nêhiyawêwin forms were obtained from the more conservative speaker (Bill) from Northern Alberta -- and were double checked. These forms are most unusual and do not occur in the other dialects I have tested. They involve the process of IC in conjunction with the independent form of the verb -- and IC normally does not occur with independent mode. As a result, these forms are suspect and require further research with other speakers of that northern dialect. The past tense form by itself would be particularly suspect; however, the corresponding form for future tense (as noted by Dave Pentland, p.c.) provides considerable support for my claim that these forms actually represent an instance of Initial Change in the dialect. Initial Change is no longer a robust process in Nêhiyawêwin; and as a result, it may take more erratic forms in the language as the usage wanes.

The bolded forms represent past tense in wh-questions in Ojibwa, Moose Cree, and in Independent forms of Nêhiyawêwin. The variability in the form of the (bolded) "complementizer" in past tense for the three languages in (1) reflects the form of their respective past tense morpheme.

In these three cases, I claim that the past tense forms represent the process of Initial Change⁶ on the past-tense morpheme in the language in question. Hence the past tense meaning. In other words, the *kâ-* shown for Moose Cree is not the same complementizer" as occurs in the (conjunct mode) Nêhiyawêwin wh-questions or in the relative clause examples for all three languages in (2). Nêhiyawêwin wh-questions in the conjunct mode use *kâ-* in every tense -- along with the appropriate tense marker.

The table in (2) shows the Complementizers used in all three languages for relative clauses and focus constructions. You will note that the form is standardized as *kâ*-⁷ in all three languages. (The [7] represents glottal stop.)

(2) Relative Clauses and Nêhiyawêwin (Plains Cree) Wh-environment

	Ojibwa	Moose Cree	Nêhiyawêwin (Plains Cree)	
			Rel Clause	Wh-
PRESENT:	kâ-	kâ-	kâ-	kâ-
PAST:	kâ-kî7- COMP + 'past'	kâ-kî- COMP + 'past'	kâ-(kîh)- COMP + (past)	kâ-(kîh)- COMP + (past)
FUTURE	kâ-wî7 COMP + 'fut'	--	kâ-wîh- COMP + 'fut'	kâ-wîh- COMP + 'fut'

⁶ Initial Change is a morphophonological process which ablauts the first vowel in the verb complex. According to Rogers (1978), Initial Change functions to focus an argument or a "condition" on the clause -- or from another perspective, IC subordinates a clause to a constituent or some condition of its context in the discourse.

⁷ This complementizer is analyzed as being derived historically from the process of Initial Change on *PA *kî-*. The source of reconstructed **kî-* varies as 'past tense' *kî-* in some analyses (cf. Wolfart 1973, for example) and *kî-* the preverb form of *kîwî* 'around' (attributed to Goddard in Clarke et al (1993), and Pentland p.c.).

The last column shows that the Nêhiyawêwin complementizer for wh-questions in Conjunct mode fits into this pattern. For a complete discussion of the data, cf. Blain (1996).

Given the evidence above, I argue that *kâ-* in Nêhiyawêwin does not distinguish tense *per se*. But rather it is some notion of presupposition or reference to some specific event or person or thing involved in the restrictive clause which carries with it this sense of realized time. The forms given for Nêhiyawêwin are based on observations from one speaker from the Northern Alberta dialect -- though the general claims with respect to *kâ-* complementizer hold for other speakers as well. More research and investigation is required in the Northern Alberta dialect.