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## Quantified NPs in Pronominal Argument Languages: Evidence from Swampy Cree

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This paper examines the role of quantification in non-configurational languages. Specifically, we will examine the Pronominal Argument Hypothesis (PAH) originally advanced by Jelinek (1984) and the claim by Baker (1991b, 1994) that the PAH predicts that strongly quantified NPs should be impossible in non-configurational languages. We look at data from the Swampy dialect of Cree, an Algonquian language spoken in northern Manitoba, which shows all the properties of a pronominal argument language yet allows strongly quantified NPs. We propose an Anti-Locality Condition to account for the interaction between strongly quantificational elements and pronouns and show how the strongly quantified NPs of Swampy Cree respect this condition. Further, we show that the same mechanism is not available to Wh-elements, which forces us to admit, like Baker (1991b), that the standard adjunct analysis is impossible for Wh-questions. But where Baker weakens the PAH by proposing that Wh-questions involve traces rather than pronominal arguments, we show that Wh-questions in Cree and a number of other non-configurational languages involve cleft constructions, suggesting that we can preserve a strong version of the PAH.

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## 1. The Pronominal Argument Hypothesis

### 1.1 Properties of non-configurational languages

Since the work of Hale (1993), the term “non-configurational” has come to be applied to any language that exhibits a constellation of properties which includes free constituent order, null anaphora, and discontinuous constituents.

Free constituent order means that the major constituents of the sentence—subject, verb, and object—can occur in any order without affecting the grammaticality of the sentence. This can be illustrated by the following set of sentences from Swampy Cree, where any of the six possible constituent orders are grammatical:

- (1) a. SOV [awa awâsis] kî-wâpamêw [anihi pinêsîsa]  
 b. SVO [awa awâsis] [anihi pinêsîsa] kî-wâpamêw  
 c. VSO kî-wâpamêw [awa awâsis] [anihi pinêsîsa]  
 d. OSV [anihi pinêsîsa] [awa awâsis] kî-wâpamêw  
 e. OVS [anihi pinêsîsa] kî-wâpamêw [awa awâsis]  
 f. VOS kî-wâpamêw [anihi pinêsîsa] [awa awâsis]

‘This child saw those birds.’

Null anaphora refers to the property of the language that allows it to omit overt NPs without affecting the grammaticality of the sentence. The Swampy Cree sentence in (1a), for example, is grammatical even if the subject, object, or both have been omitted:

- (2) awa awâsis kî-wâpamêw ‘This child saw him/her/them.’  
 kî-wâpamêw anihi pinêsîsa ‘S/he saw those birds.’  
 kî-wâpamêw ‘S/he saw him/her/them.’

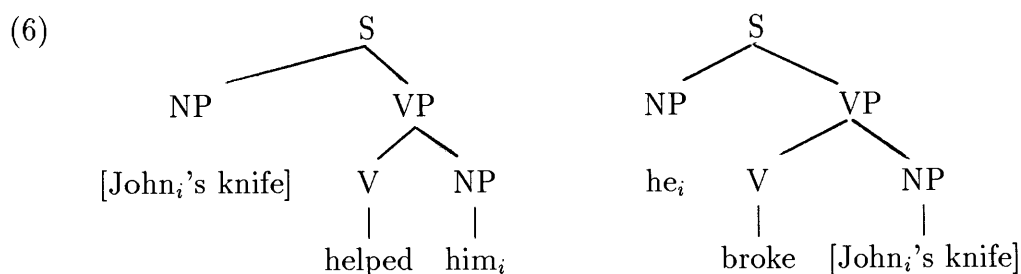
Overt NPs may also be discontinuous. That is, pieces of what seem to belong to the same NP can be distributed throughout the sentence. For example, the determiner *anihi* can occur on the opposite side of the sentence from its apparent head noun, as in (3), as can the relative clause in (4):

- (3) [anihi] kî-wâpamêw [pinêsîsa] ‘S/he saw those birds.’  
 those s/he-saw-them birds
- (4) [kahkinaw anikik nâpêwak] nikî-ayamihâwak [kâ-kî-takosihkik tipiskohk]  
 all those men I-talked-to-them that-they-arrived last-night  
 ‘I talked to all the men who came last night.’

Besides the three core properties of non-configurationality outlined by Hale,

Swampy Cree also shows other properties which seem to indicate the lack of hierarchical relationships between arguments of a sentence. A configurational language like English will show subject/object asymmetries such as the one illustrated in (5), where an NP within the subject can be coreferential with the object, but an NP within the object cannot be coreferential with the subject, indicating that the subject c-commands the object, but not vice versa.

- (5) a. [John<sub>i</sub>'s knife] helped him<sub>i</sub>  
 b. \* He<sub>i</sub> broke [John<sub>i</sub>'s knife]



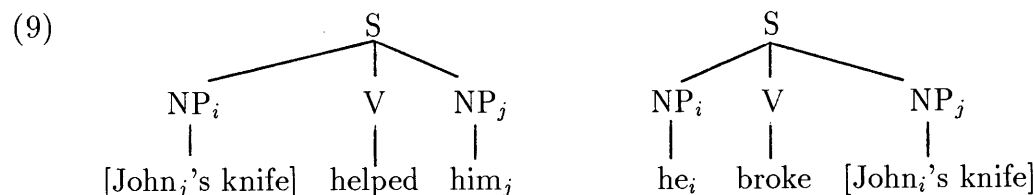
Baker (1991a) says that the Mohawk equivalent of (5b) is grammatical (7). The Swampy Cree equivalents of (5a–b) are also grammatical (8).<sup>2</sup>

- (7) Mohawk:  
 wa'thaya'ke' ne [thikv Sak rao-'share' ]  
 he-broke-it NE that John his-knife  
 'He<sub>i</sub> broke that knife of John<sub>i</sub>'s'

- (8) Swampy Cree:  
 a. John o-môhkomân kî-wîcihik  
 John his-knife helped-him  
 'John<sub>i</sub>'s knife helped him<sub>i</sub>.'  
 b. kî-pîkonam [animêniw John o-môhkomân]  
 he-broke-it that John his-knife  
 'He<sub>i</sub> broke that knife of John<sub>i</sub>'s.'

It is interesting to note that a flat phrase structure, a common early proposal for non-configurality (e.g., Chomsky 1981), will not derive the grammaticality of (8b). In a flat phrase structure, not only does the subject still c-command the object, still predicting the ungrammaticality of (8b), but the object also c-commands the subject, incorrectly predicting the ungrammaticality of (8a) as well!

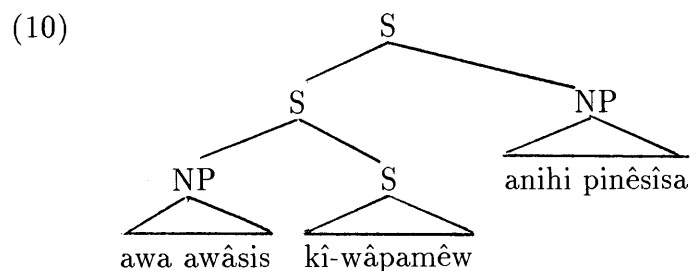
<sup>2</sup>(8b) is sometimes judged as slightly odd. This oddity does not come from a subject/object asymmetry, but from ordering the possessive *John* between the determiner and the possessed noun (in such a way as to prove that it forms part of the object NP). (8b) is no less grammatical than the sentence *nikî-pîkonên animêniw John o-môhkomân* 'I broke that knife of John's.' Some speakers may also find (8a) odd because its subject is inanimate.



## 1.2 The Pronominal Argument Hypothesis

One of the most successful proposals for accounting for these properties has been the Pronominal Argument Hypothesis (PAH), originally advanced by Jelinek (1984) and developed in later work by Jelinek, by Baker (1991ab, 1994), Junker (1993), and others.

Under the PAH, the thematic requirements of a verb are not satisfied by the overt NPs in a non-configurational language, but rather by pronominal elements, which either take the form of “agreement” morphology on the verb or in later accounts are instances of *pro*. Any overt NPs in a non-configurational language are not arguments of the verb, but are adjoined to the sentence. In order to be licensed, these adjoined NPs must be linked to a pronominal argument within the verbal complex. (We assume that this “linking” is ordinary coindexation and subject to the Binding Principles.) The structure of sentence (1a) would look like:



The status of overt NPs as adjuncts explains the three core properties noted by Hale (1983): they can be adjoined in any order and on either side of the sentence (free constituent order), their presence is unnecessary for grammaticality since the Theta Criterion is satisfied by the pronominal arguments (null anaphora), and more than one NP referring to the same entity may be independently adjoined (apparent split constituents).<sup>3</sup> The PAH even explains the absence of expected subject/object asymmetries illustrated by sentences like (8b). The surface string of (8b) does have an analysis where the subject-linked adjunct *c*-commands the object-linked adjunct, but crucially it also has an analysis where the object-linked adjunct asymmetrically *c*-commands the subject-linked adjunct and there is no Principle C violation.

<sup>3</sup>The standard PAH explanation for split constituents is in fact problematic, both theoretically and empirically, and is rejected (with different replacements) by Baker (1994) and Russell and Reinholtz (1995).

### 1.3 The PAH and strong quantification

There are certain patterns we might expect to find if the PAH were the correct analysis for non-configurational languages.

A wide variety of languages show evidence of a constraint against allowing a pronoun to be bound by a strong quantifier in an A-bar position.

- (11) Italian (Rizzi 1986):
- a. \* Nessuno, lo conosco in questa citta  
Nobody, I know him in this city
  - b. \* Tutto, lo diro alla polizia  
Everything, I will say it to the police
- (12) Berber (Ouhalla 1991):
- a. Man ihmdarn ay yzrin Mohand ?  
which students COMP saw-PART Mohand  
'Which students saw Mohand?'
  - b. \* Man ihmdarn ay zri- n Mohand ?  
which students COMP saw-3pl Mohand

If this is a universal constraint, then we would expect strong quantifier NPs to be impossible in pronominal argument languages. As an NP, the strong quantifier would have to be an adjunct and would have to be linked with a pronominal argument, but the pronoun could not legally be coindexed with it. This is in fact the argument made by Baker (1991b), who notes that Mohawk does indeed have no strong quantifiers. While (13), with the weak quantifier *akweku* 'all' and plural agreement morphology on the verb, is grammatical, it is not possible to construe *akweku* as a strong quantifier along the lines of English 'everyone', taking singular agreement morphology (14):

- (13) Akweku wa- hoti- yeshu-'  
all fact-masc:pl-laugh-punc  
'Everybody laughed'
- (14) \* Akweku wa- ho- yeshu-'  
all fact-masc:sg-laugh-punc

At first glance, the same contrast seems to hold in Swampy Cree between a grammatical 'all' with plural agreement (15) and an ungrammatical 'every' with singular agreement (16), and Baker's prediction about strong quantification in non-configurational languages seems to be upheld.

- (15) kahkinaw kî-sipwêhtêwak      ‘Everybody left’  
 all            they-left
- (16) \* kahkinaw kî-sipwêhtêw  
 all            he-left

However, while not construing *kahkinaw* by itself as a strong quantifier, Cree does allow strongly quantified NPs. All speakers allow the NP *kahkinaw awiyak* ‘everyone’ with singular agreement (17), and some allow the free formation of strongly quantified NPs using *kahkinaw* (18).

- (17) [kahkinaw awiyak] kî-sipwêhtêw      ‘Everybody left’  
 everybody            he-left
- (18) [kahkinaw nâpêw] kî-sipwêhtêw      ‘Every man left’  
 every    man    he-left

These NPs display the same characteristics as any other adjoined NP in the language. They can be freely ordered with respect to the verb and NPs linked with other arguments and they can even occur as discontinuous constituents. The following are all acceptable versions of (17):

- (19) a. [kahkinaw awiyak] kî-sipwêhtêw  
 b. kî-sipwêhtêw [kahkinaw awiyak]  
 c. [kahkinaw] kî-sipwêhtêw [awiyak]

So, contrary to the prediction of Baker (1991b), we seem to have strongly quantified NPs occurring as adjuncts and being coindexed with pronouns in argument positions. In the next section, we look in more detail at the patterns of grammaticality for Swampy Cree quantifiers before turning to the question of how they are possible in the first place.

## 2. Quantified NPs in Swampy Cree

Prior to looking at the distribution of quantified NPs in Swampy Cree, it is important to establish the existence of strongly quantified NPs. We take a strongly quantified NP to be one with universal force and singular reference. In English, this applies to *everyone*, but not, for example, to *all people*, which has plural reference. Evidence that Swampy Cree has strongly quantified NPs comes first of all from the occurrence of quantifiers with universal force in NPs with singular count nouns and singular reference, for example *kahkinaw awâsis* ‘every child’ and *pâhpêyak awâsis* ‘each child’ in (20a,b) below.

- (20) a. kahkinaw awâsis kî-sipwêhtêw(\*-ak)  
 every child he-PAST-leaves-(\*PLUR)  
 ‘Every child left.’
- b. pâhpêyak awâsis kî-sipwêhtêw(\*-ak)  
 each child he-PAST-leaves-(\*PLUR)  
 ‘Each child left.’

Also notice that the verb stem in (20a,b) must be singular. The addition of a plural suffix *-ak* is ungrammatical as indicated with ‘(\*-ak)’. In contrast, *mihcêt* ‘many’, or plural *kahkinaw* ‘all’ in (21a,b) occur with a plural count noun, and here the verb stem must have a plural suffix, as shown with starred brackets.

- (21) a. Mihcêt awâsisak kî-sipwêhtêw-\*(ak)  
 many children he-PAST-leaves-\*(PLUR)  
 ‘Many of the children left’
- b. Kahkinaw awâsisak kî-sipwêhtêw-\*(ak)  
 all children he-PAST-leaves-\*(PLUR)  
 ‘All of the children left’

It is worth emphasizing that while *kahkinaw* lends itself both to a singular and a plural usage (‘every’ and ‘all’), it cannot be analyzed as an adverbial which unselectively binds a separate NP. *Kahkinaw* cannot be understood as, e.g., a time or place adverbial, but only as a nominal quantifier.

It is also important that Swampy Cree strong quantifiers get an ‘every individual’ reading when they occur with a singular count noun. In contrast to, e.g., *misiwê* ‘whole’ in (22b), *kahkinaw* can only receive an ‘every individual’ reading characteristic of strong quantifiers when it occurs with a singular count noun, as in (22a).<sup>4</sup>

- (22) a. kahkinaw wâskahikan<sub>i</sub> pro<sub>i</sub>-kî-pasitêw  
 every house it-PAST-burns  
 ‘Every house burnt.’  
 \*‘All of the house burnt.’
- b. Misiwê kinosêw-a<sub>j</sub> pro<sub>i</sub>-kî-mowêwak-pro<sub>i</sub>  
 complete fish they-PAST-eat-it  
 ‘They ate the whole fish.’  
 \*‘They ate every fish.’

The existence of bound variable singular pronouns also shows that Swampy

<sup>4</sup>Unlike *kahkinaw* ‘every, all’, *misiwê* ‘whole’ can also be used as a separate adverbial. Thus (22b) can also mean ‘They ate fish all over the place.’



Cree has strongly quantified NPs. This is illustrated in (23a,b). In the first example, a singular possessive pronoun is bound by a strongly quantified subject *kahkinaw awiyak* 'everyone'. In the second example, a pronominal argument in a subordinate clause is bound by a strongly quantified NP *kahkinaw awiyak* 'everyone' in the matrix clause.

- (23) a. *kahkinaw awiyak pro<sub>i</sub>-kî-wîcîhêw-pro<sub>j</sub> otawâsimisa*  
 every person he-PAST-helps-her his-child  
 'Everyone<sub>i</sub> helped his<sub>i</sub> child.'
- b. *kahkinaw awiyak pro<sub>i</sub>-kî-itwêw [pro<sub>i</sub>-ê-wî-kîwêt ]*  
 every person she-PAST-says she-FUT-goes-home  
 'Everyone<sub>i</sub> said that she<sub>i</sub> was going to go home.'

Although strongly quantified NPs are found in Swampy Cree, they are subject to a restriction which shows that they are not freely coindexed with pronominal arguments. Weak quantifiers may occur not only as part of a larger containing or discontinuous NP, but also as proform nominals which are independently coindexed with a pronominal argument. This is illustrated for *kahkinaw* in its weak, plural usage in (24) below.

- (24) a. [<sub>NP</sub> *kahkinaw awâsisak*]<sub>i</sub> *pro<sub>i</sub>-kî-sipwêhtêwak*  
 all children they-PAST-leave  
 'All the children left.'
- b. *kahkinaw pro<sub>i</sub>-kî-sipwêhtêwak* [<sub>NP</sub> *awâsisak*]<sub>i</sub>  
 all they-PAST-leave children  
 'All the children left.'
- c. [<sub>NP</sub> *kahkinaw*]<sub>i</sub> *pro<sub>i</sub>-kî-sipwêhtêwak*  
 all they-PAST-leave  
 'All (of them) left.'

Strong quantifiers are not allowed the last option. They may occur as part of a larger containing or discontinuous NP. This was shown in (19). However strong quantifiers cannot function as proform nominals which are independently coindexed with a pronominal argument. Thus, ungrammaticality results when a strong quantifier is coindexed with a pronominal argument. This was shown in (16).

These facts show that Swampy Cree does restrict strongly quantified NPs. In line with Baker (1991b), we believe that the restricted occurrence of strongly quantified NPs is related to the fact that Swampy Cree is a non-configurational language. Specifically, we wish to account for the restricted occurrence of strongly quantified NPs in terms of the binding relation implicit in the licensing of overt NPs. Un-

der the Pronominal Argument Hypothesis (PAH), the argument structure in non-configurational languages is entirely pronominal and, in Cree, contained within the verbal complex. An overt NP is an adjunct occupying an A'-position and must be licensed under referential linking (coindexation) with a pronominal argument. Assuming that pronouns cannot be quantifier bound, we might expect a blanket prohibition against strong nominal quantifiers, which is more or less what Baker (1991b) proposes. The challenge which Swampy Cree presents lies with explaining why strongly quantified NPs are not ruled out altogether, but rather have the restricted occurrence illustrated earlier.

The answer to this question must lie with the grammatical condition responsible for disjoint reference effects between quantifiers and pronouns. Specifically, we wish to propose an Anti-Locality Condition (ALC) on quantifier bound pronouns which applies at LF in Swampy Cree:

(25) **Anti-Locality Condition (ALC)**

A pronoun must be locally quantifier free.

The ALC follows earlier proposals in McCloskey (1990), Borer (1984), Aoun and Li (1991), and Ouhalla (1993) in disallowing direct quantifier binding of pronouns. We depart from these proposals in two regards. Firstly, following Baker (1991b), we use the term "quantifier" in the strict sense of a strong quantifier with universal force and singular term of reference. Secondly, Local Quantifier Binding is defined in terms of minimality alone, without appeal to a Governing Category.

(26) **Local Quantifier Binding**

A quantifier Q locally binds a pronoun P iff Q binds P, and there is no intervening non-quantifier Z coindexed with Q and P, which minimally c-commands P.

The ALC targets a specialized case of binding, namely direct binding of a pronoun by a quantifier. It should be clear from the outset that a broader statement in terms of A'-binding is not viable. Under the PAH, the grammatical occurrence of overt NPs constitutes *prima facie* evidence that pronouns may be A'-bound. That is, the PAH holds that all overt NPs are adjuncts in A'-position and licensed under coindexation with a pronominal argument in the verbal complex. Overt NP adjuncts therefore can and do occur in positions where they c-command, and so bind, the pronominal argument with which they are coindexed, as was shown in (10).

Strongly quantified NPs, on the other hand, cannot be coindexed with a pronominal argument without violating the ALC. Adopting the view that scopal relations are faithfully depicted in LF, a strong quantifier NP like *kahkinaw* 'everyone' in (27) will necessarily have the LF representation in (28), where *pro* is locally quantifier bound in violation of the ALC:

(27) SS: \*  $pro_i$ -kî-sipwêhtêw [ $NP$  kahkinaw]<sub>*i*</sub>  
           he-PAST-leaves               everyone

(28) LF: \* [ $NP$  kahkinaw]<sub>*i*</sub>  $pro_i$ -kî-sipwêhtêw

This does not apply to complex NPs which are strongly quantified. Hornstein and Weinberg (1990) argue that a complex NP with both a quantifier and a lexical noun can be stranded when Quantifier Raising applies to the quantifier. Hence the absence of a Superiority Effect in examples like (30), where QR can apply with NP stranding:

(29) SS: John wondered [what<sub>*i*</sub> [who bought t<sub>*i*</sub>]]  
       LF: John wondered [what<sub>*i*</sub> who<sub>*j*</sub> [t<sub>*j*</sub> bought t<sub>*i*</sub>]]

(30) SS: John wondered [which book<sub>*i*</sub> [which boy bought t<sub>*i*</sub>]]  
       LF: John wondered [which book<sub>*i*</sub> which<sub>*j*</sub> [ [ $NP$  t<sub>*j*</sub> boy] bought t<sub>*i*</sub>]]

Adopting this analysis, the grammatical example in (31) has the LF representation in (32):

(31) SS: [<sub>*S*</sub>  $pro_i$ -kî-sipwêhtêw] [ $NP$  kahkinaw iskwêw]<sub>*i*</sub>  
           she-PAST-leaves           every       woman

(32) LF: kahkinaw<sub>*j*</sub> [ [<sub>*S*</sub>  $pro_i$ -kî-sipwêhtêw] [ $NP$  t<sub>*j*</sub> iskwêw]<sub>*i*</sub> ]  
           every                   she-PAST-leaves               woman

Here QR has applied to the quantifier *kahkinaw* ‘every’, raising this to an adjoined position where it takes maximal scope over its clause. An ALC violation does not arise because QR is incapable of producing a referential trace when it applies to a quantifier, rather than its containing, referentially indexed NP. When this happens, the stranded NP *iskwêw* ‘woman’ can only be an indefinite NP, construed in the narrow scope of the raised quantifier *kahkinaw* ‘every’. As an indefinite, rather than strongly quantified NP, *iskwêw* ‘woman’ can be coindexed with *pro* without violation of the ALC. This explains why a strongly quantified NP can also be found in clause-initial position, as in (33) which has the LF representation in (34), where the stranded indefinite minimally c-commands the *pro* it is coindexed with.

(33) SS: [ $NP$  kahkinaw iskwêw]<sub>*i*</sub> [<sub>*S*</sub>  $pro_i$ -kî-sipwêhtêw]  
           every       woman       she-PAST-leaves

(34) LF: kahkinaw<sub>*j*</sub> [ [ $NP$  t<sub>*j*</sub> iskwêw]<sub>*i*</sub> [<sub>*S*</sub>  $pro_i$ -kî-sipwêhtêw] ]  
           every                   woman       she-PAST-leaves

Also notice that the raised quantifier in (32) and (34) is not coindexed with *pro* or the stranded NP, and so cannot give rise to an ALC violation. This last point is also important in explaining the contrast between strongly quantified discontinuous NPs, which are grammatical, and strong quantifier proforms, which are not. Consider the examples in (35) below:

- (35) a. kahkinaw *pro*<sub>i</sub>-kî-sipwêhtêw [<sub>NP</sub> awâsis]<sub>i</sub>;  
           all           she-PAST-leaves           child  
           ‘Every child left.’
- b. \* kahkinaw<sub>i</sub> *pro*<sub>i</sub>-kî-sipwêhtêw  
           all           she-PAST-leaves

The grammatical example in (35a) shows a strongly quantified discontinuous NP. We propose that the discontinuous NP in (35) results from movement. The strong quantifier *kahkinaw* ‘every’ has moved out of its containing NP, producing the syntactic equivalent of the LF structure given in (32). That is, movement of a nominal quantifier is incapable of leaving behind a visible trace, and the stranded NP can only be an indefinite NP construed in the narrow scope of the raised quantifier. Not being coindexed with *pro* or with the stranded NP, the raised quantifier cannot give rise to an ALC violation. As an indefinite rather than a strongly quantified NP, the stranded NP remains coindexed with *pro* without violation of the ALC.

On the ALC account outlined in the preceding, we preserve a strong version of the PAH. That is, argument structure is entirely pronominal and contained within the verbal complex. Overt NPs are adjuncts, and licensed under coindexation with pronominal arguments. As we might expect under the ALC proposed here, Swampy Cree rules out strongly quantified NPs in cases where this entails local, i.e. minimal, quantifier binding of a pronominal argument. A strong version of the PAH also leads us to expect that wh-phrases, which occupy a position of maximal scope, cannot be coindexed with a pronominal argument since this would result in an ALC violation. This prediction is discussed in the following section along with a proposal which preserves a strong version of the PAH.

### 3. Questions

Wh-elements also act as strong quantifiers, and according to the ALC they should not be able to bind a pronominal argument. Moreover, the escape hatch we saw for other strongly quantified NPs in the last section will not be available for Wh-elements. We might expect, therefore, that Wh-questions will be impossible in a pronominal argument language. Pronominal argument languages obviously do have Wh-questions; the problem to be explained is how.

Noticing this prediction, Baker (1991b, 1994) proposes weakening the PAH.

According to him, arguments in a non-configurational language need not be pronouns, they must simply be phonetically empty for case-theoretic reasons. So not only can instances of *pro* occur in A-positions, Wh-traces can as well. Baker argues that Wh-phrases start out in argument position at D-structure and raise to Comp at S-structure, leaving behind Wh-traces which satisfy the Case Filter. He supports this claim by noting that, unlike any other kind of NP, Wh-phrases are restricted to occurring at the left edge of the sentence:

- (36) nahotv wa- hs- hninu-’                    ‘What did you buy?’  
       what fact-2sgI-buy- punc
- (37) \* wa- hs- hninu-’                    nahotv  
       fact-2sgI-buy- punc        what

We believe this step severely weakens the PAH. Moreover, it forces one to accept the analysis where all non-Wh arguments are *pro* rather than phonologically overt pronouns and all person-number markers are merely agreement, rejecting Jelinek’s original proposal that all (or some) “agreement” morphemes actually serve as the arguments. It is by no means clear that this is true of Cree and all other non-configurational languages (cf. Phillips 1993 on Yimas).

Fortunately, the morphology of Wh-questions in Cree suggests an alternative analysis. The question in (38) uses conjunct order verb inflections, characteristic of subordinate clauses. The independent order inflections characteristic of declarative main clauses, as in (39), are ungrammatical in Wh-questions, as seen in (40).

- (38) awêna kâ- kî- wâpamat                    ‘Who did you see?’  
       who        that-PAST-you-see-her
- (39) ki- kî- wâpamâw                    ‘You saw him/her.’  
       you-PAST-see-her
- (40) \* awêna ki- kî- wâpamâw  
       who        you-PAST-see-her

Where a Wh-word is homophonous with an indefinite pronoun, it can only be interpreted as an indefinite in any sentence that uses main-clause morphology:

- (41) kêkwân ki-kî-wâpahtên  
       what        you-PAST-see-it  
               \* ‘What did you see?’  
               ‘You saw something.’

Finally, as in Mohawk, Wh-phrases must be sentence-initial, a restriction which is placed on no other kind of NP:

- (42) \* kâ- kî- wâpamat awêna  
 that-PAST-you-see-her who

The requirement for Wh-phrases to occur in strict sentence-initial position, together with the requirement that the verb in Wh-questions take subordinate-clause morphology, in fact the same kind of morphology used in the relative clause in (4), suggests that we are dealing with a cleft construction. The structure of a Wh-question would not be the same as a normal indicative sentence, but rather:

- (43) awêna<sub>i</sub> [ Op<sub>i</sub> [ kâ-kî-wâpamat-*pro*<sub>i</sub> ] ]  
 who-is-it REL you-PAST-see-her<sub>i</sub>

In this structure, there is no violation of the ALC. The strong quantifier *awêna* does not locally bind the pronominal argument in the relative clause. Rather, the coindexation is mediated licitly through a relative operator, Op<sub>i</sub>.

The same pattern seems to be found in other non-configurational languages. In Yimas (Foley 1991), Wh-phrases must occur sentence-initially, and the following sentence must be inflected as a relative clause (44) rather than an independent clause (45):<sup>5</sup>

- (44) nawn m- na- ya- n 'Who is coming?'  
 who:sg REL-DEF-come-PRES

- (45) \* nawn na- na- ya- n  
 who:sg 3sg:subj-DEF-come-PRES

In Nunggubuyu (Heath 1984), Wh-phrases must also be sentence-initial. While Nunggubuyu has no overt morphological marking of main clause or subordinate clause status which would prove the existence of a cleft, Heath argues forcefully that Wh-questions involve two separate predications.

- (46) yaŋi ni=na-ñ 'What did he see?'  
 what he-saw-it

<sup>5</sup>The one exception to this is when questioning a direct object when the subject of the sentence is third person. In this case, there is no relative morpheme, but there is also no agreement for the Wh-word on the verb. One possible analysis for this situation is that the Wh-word is functioning as an incorporated nominal or as a pronominal argument remaining in situ.

- (47) ma=yaji      nima=na-ñ      ‘What did he see?’  
 [it was] what? he-saw-it
- (48) ama=yaji      anima=na-yi:      ‘What will he see?’  
 [it will be] what? he-will-see-it

Mohawk, like Nunggubuyu, has no overt verbal morphology sensitive to main or subordinate clause status. It remains to be seen if a cleft analysis could work in Mohawk as well. If so, we can keep a strong version of the PAH, maintaining that *all* arguments are pronouns, without depriving non-configurational languages of Wh-questions or violating the Anti-Locality Condition.

#### 4. Conclusion

In this paper, we have examined the role of quantification in non-configurational languages. While strongly quantified NPs (including Wh-phrases) are not entirely absent in any non-configurational language, they are clearly limited in occurrence. We concur with Baker (1991b) that the restricted occurrence of strongly quantified NPs should be related to the PAH. Specifically, we have argued that the restricted occurrence of strongly quantified NPs relates to the binding relation implicit in the licensing of overt NPs, i.e., via coindexation with a pronominal argument. We have further proposed that the limited occurrence of strongly quantified NPs should be explained in terms of an Anti-Locality Condition, which rules out direct (minimal) binding of a pronoun by a strong quantifier. This severely limits the distribution of strongly quantified NPs, however it does not preclude pronouns bound by indefinite NPs which are construed in the narrow scope of a raised quantifier, or the bound pronouns found in Wh-clefted constructions. This last point is important, largely because we preserve a strong version of the PAH, but also because it is crucial that an account which explains the limited occurrence of strongly quantified NPs in terms of the PAH do so without weakening the central premise, namely that argument structure is entirely pronominal in non-configurational languages.

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