A-Movement and Interpretation in a Northern Iroquoian Language

This paper examines the position and interpretation of nominal projections headed by the determiner ne^2 in Gayogoho:no² (Cayuga), a severely endangered Northern Iroquoian (NI) language spoken on the Six Nations Reserve in Ontario, Canada. Data are from published oral texts as well as native (L1) speaker judgments. We argue that ne^2 -headed DPs undergo Object Shift-type extraction out of vP to escape existential closure in the sense of Heim (1982), as well as A movement to subject position. These results are noteworthy in light of the widespread view that unincorporated overt nominal arguments in NI languages uniformly occupy base generated A-bar positions.

Background and previous research

Cognates of Gayogoho: $nq^2 ne^2$ are found in all the Five Nations languages within NI. [Ne^2 NP] (i) is mainly restricted to postverbal position (Postal 1979: 413 for Kanien'kéha (Mohawk), Mithun 1987: 27 for Gayogoho: nq^2); and (ii) ne^2 is obligatory on anaphoric DPs. Thus (1a) disallows coreference with an antecedent in preceding discourse if ne^2 is absent, while (1a-b) are ill-formed with [ne^2 hehshái:] in sentence-initial focus position (b) or noninitial preverbal position (c).

(1) a. Ó:nęh nę́:gwa [?] a [?] -họ:wá:-gę- [?]	ne [,] hehshái:.	(Lottie Keye, Hatcher 2022: 184)
now suddenly FCT-3FS>3MS-see-	-PNC NE [?] fox	
'Now suddenly she saw the fox.'		
b. (*Ne?) hehshái: ó:nẹh nệ:gwa? a?h	iq:wá:gę?.	
NE [?] fox next suddenly FCT-	-3FS>3MS-see-PUNC	
c. Ó:neh né:gwa? (*ne?) hehshái: a?h	q:wá:gę².	
now suddenly NE [?] fox FCT	-3FS>3MS-see-PUNC	

Ne² as determiner

 Ne^2 shows a number of determiner-like properties. It may be immediately preceded by demonstratives (7) or quantifiers (both of which we take to be in Spec, D), and heads internally-headed relative clauses. Baker (1996: 253), following Chamorro (1992) argues that Kanien'kéha *ne(?)* is not a "semantically significant" determiner. Chamorro presents a range of nonanaphoric contexts where Kanien'kéha *ne(?)* occurs with a nondefinite interpretation, showing that *ne(?)* is not just a definite determiner.

However it is not the case that this morpheme is simply optional in nonanaphoric contexts, as shown by the Gayogoho:no[?] equivalents of Chamorro's data in (2-5).

(2) Joe a-ha-tsei:-? $ne^{2}/\emptyset ga$	hén ² atra ² .	(cf. Chamorro 1992: 37, example (36))
Joe FCT-3SMA-find-PNC NE [?] km	fe	· · · · · · · · · · · · · · · · · · ·
(i) Without <i>ne²</i> : 'Joe found a knif	e (in the woods)'	
(ii) With <i>ne²</i> : 'Joe found a knife (that I lost)'	
(3) Ahseh nihe:no: e-ha-dó:wa:t	ne?/Ø hnyágwai?.	(cf. Chamorro 1992: 38, example (37))
3 males FUT-3SMA-hunt-P	NC NE [?] bear	· · · · · · · · · · · · · · · · · · ·
(i) Without <i>ne⁷</i> : 'Three males wil	l hunt bear, be bear hunter	·s.'
(ii) With <i>ne²</i> : 'There is a bear that	t three males will hunt.'	
(4) Joe de-h-odohwejo:nih a-ha-yé:n	a-? ne?/Ø jidé:?e	h. (cf. Chamorro 1992: 37, example (33))
Joe du-3SMP-want-HAB OPT-3Sm	A-grabPUNC NE [?] bird	· · · · · · · · · · · · · · · · · · ·
(i) Without <i>ne⁷</i> : 'Joe is a bird grad	ober, has bird grabbing ter	ndencies (for example, he is cat)'
(ii) With <i>ne⁷</i> : 'Joe wants to grab a	bird (the red one).'	
(5) Tę ² onęh d ² e-g-oháhai- ² ne ²	Ø g'adréhda'.	(cf. Chamorro 1992: 37, example (32))
not now NEG-1SA-wash-PNC NE [?]	car	· · · · · · · · · · · · · · · · · · ·
(i) Without <i>ne³</i> . 'I haven't vet wa	shed cars had car washin	α experience '

- (i) Without *ne*²: 'I haven't yet washed cars, had car washing experience.'
- (ii) With *ne[?]* 'I haven't yet washed any cars'

Omission of ne^2 derives low scope existential readings. (2i) receives a nonspecific interpretation, (3i) a reading under the scope of the numeral quantifier '3 males', (4i) a de dicto interpretation under the scope of 'want', and (5) an interpretation under the scope of negation. These readings are consistent with the behavior of indefinites as "new" variables under the scope of existential closure at the VP (or vP) level, the original analysis of Heim (1982). In contrast, the sentences with ne^2 derive readings that have been associated since the work of Diesing (1992) with extraction outside the scope of existential closure: $[ne^2 NP]$ in (2ii) is specific, in (3ii) scopes over the numeral quantifier, in (4ii) is de re, and in (5ii) produces an intermediate scope reading in the sense of Abusch (1994).

Analysis

These facts show that Baker (1996) was correct in characterizing ne^2 as not semantically significant, but the syntactic behavior of ne^2 is highly significant for semantic interpretation: bare ne^2 carries an Edge feature that forces movement of $[ne^2 NP]$ out of the verbal projection and existential closure (6):

(6) [TP a [?] -hǫ:wá:-	[AspP [-ge-] - (vP)]	$[ne^{\gamma} hehshái:]_i [_{\nu P} pro [_{\nu P} t_{\nu} t_i]]]]$
FCT-3FS>3MS	-see-PNC	NE [?] fox
'She saw the fox.'		

In (6), following Barry et al (2014), the verb undergoes cyclic head movement to Aspect and $[ne^2 NP]$ is extracted to an outer specifier of vP. Two other patterns support the hypothesis of A-type extraction of $[ne^2 NP]$. Bonvillain (1985) observes that in Kanien'kéha the prohibition on noninitial preverbal $[ne^2 NP]$ that we saw in (1b-c) does not apply to subjects. The same is true in Gayogoho:no²:

(6)	Oh dó:gęhs	[ne [?] hehshái:]	ho-d-ǫtgá:d-e [?]		ho-yó:di-h	hni [?] .
	oh truly	NE [?] fox	3SMP-SRF-happy-PUR	P.PUNC	3SMP-SRF-smile-P	UNC and
	'Oh truly th	e fox was happy	and was smiling.'	(Lottie	Keye, Hatcher 202	2: 182)
(7)	Ó:nęh [ne [?] l	nehshái:] a [?] howa	<u>a</u> -hộ:dọ- [?] nệ:gy	vęh ne [?] oh	nyágwai [?]	
	next NE [?] f	ox fact-3MS	>3MS-ask-PUNC this	NE ⁹ be	ar	
	'Next the fo	ox asked this bea	ır.'	(Lottie	Keye, Hatcher 202	2: 183)

The subject argument $[ne^{?} hehshái:]$ may occur in preverbal position, in contrast to (1c), where nonsubject preverbal $[ne^{?} NP]$ is unacceptable. Similarly, (7) can only mean 'The fox asked this bear', not 'This bear asked the fox''. Additional evidence is provided by the distribution of the enclitics *ni*: 'I/we' and *ni*:s 'you', contractions of *ne*[?] and the independent pronouns i: '1st person' and i:s '2nd person' respectively. While the independent pronouns may occur sentence initially and crossreference subjects or nonsubjects, *ni*: and *ni*:s only crossreference subjects:

(8) Ó:nęh ni:/*ni:s ę-gǫ-yená:wa [?] s.		'Now I will help you.'	
now	I/you	FUT-1S.S>2S-help	
(9) I:/i:s ę-gǫ-yená:wa ² s.		'I will help you.'	
now	I/you	FUT-1S.S>2S-help	

The sharp contrast between subjects and nonsubjects in (6-9) indicates that fronting of $[ne^2 NP]$ to preverbal position is A movement, limited to subjects for familiar relativized minimality/Shortest Move reasons. The movement to Spec, vP posited in (6) is thus independently motivated as the first step in such a derivation, also A movement.

Selected References

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