The Northern Iroquoian Nominal Phrase and Linguistic Variation*

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Plan: 
i. Discuss the structure of the Northern Iroquoian DP
ii. Situate this wrt our understanding of linguistic variation
iii. Discuss some problems with macroparametric approaches
iv. Suggest a (tentative) structured microparametric approach along the lines of Roberts’ Parameter Hierarchies

1 The Northern Iroquoian DP

1.1 Minimal structure for free nouns

(1) NPREF-root-NFS

noun prefix (NPREF): usually corresponds to neuter agreement
inanimate N – agrees with possessor
animate/human N – agrees with referent

noun forming suffix (NFS): usually arbitrarily one of two suffixes
Onondaga – correlates to human / non-human

Onondaga examples:

(2) a. oyó:daˀ
o- yót- aˀ
NPREF- beak- NFS
‘beak’
b. onéhaˀ
o- nëh- aˀ
NPREF- corn- NFS
‘corn’

(3) a. ganákdaˀ
ka- nakt- aˀ
NPREF- bed- NFS
‘bed’
b. ganá’jyaˀ
ka- na’jy- aˀ
NPREF- bucket-NFS
‘bucket’

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(4) a. agǫ́:gweh b. dehnǫ́:gweh
   ak- ōkwe- h tehn- ōkwe- h
   3.SG.F person-NFS 3.DU.M person-NFS
   ‘woman’ ‘two men’

(5) a. age-ʔse:hd-aʔ b. swa-ʔse:hd-aʔ
    1.SG.POSS-car-NFS 2.PL.POSS-car-NFS
    ‘my car’ ‘your car (plural)’

➢ supports fairly standard view of nominal structure.

(6) … > AgrP > nP > NP (or √P)

1.2 Demonstratives and Quantifiers

➢ Can appear adjacent to their restriction or can be discontinuous.

(7) a. Mary a‘es‘ah gwe:gǫh neʔ ohyaq
    Mary she.ate all NE apple
    ‘Mary ate up every apple.’ [Cayuga]

 b. gwe:gǫh a‘es‘ah neʔ ohyaq neʔ Mary.
    all she. ate NE apple NE Mary
    ‘Mary ate up every apple.’ [Cayuga]

(8) a. John hahyagoʔ nęgyęh jisǫdak
    John picked this strawberry
    ‘John picked this strawberry’ [Onondaga]

 b. nęgyęh ahahyagoʔ jisǫdak neʔ John
    this picked strawberry NE John
    ‘John picked this strawberry’

➢ parsimonious analysis: adjacency is coincidental (Koenig & Michelson 2015; Mithun 1987)

➢ Constituency confirmed by 2P clitics and long-distance movement

(9) [nęgyęh ohyaddṟ̱hsynəndoh] geh ahadadrihənyə neʔ Hawęniyə:q,
    this book QN he read it NE H.
    ‘Did Haweniyo read this book?’

➢ possible with gwe:goh
(10) a. Gwe:gǫh ohyadrehsyǫndoh gęh ahadadihɨnyęh neˀ Hawęni:yo: all book QN he read it NE H.
‘Did Haweniyo read all the books?’

b. ? gwe:gǫh ohyad ai̊ gęh ahadihsaˀ neˀ hadiksasq’ah.
all fruit QN they ate it NE boys
‘Did the boys eat all the apples?’ (NOT: ‘Did all the boys eat the apples?’)

(11) gwe:gǫh so:wa:s soˀ ah, John ahęˀ Hawęnagǫh ahayaˀdohaih  all dog-PL J he said H he body-washed it
‘All the dogs, John said that Hawenago washed them.’

Evidence that Q is a A-type quantifier (Barrie 2017) – higher than D

Split demonstratives: gives focus reading
DEM …. N order only
N … DEM order impossible (contrasts with Warlpiri, Hale 1983)

Onondaga data

(12) a. thó:gęh wahanasgwahní:nǫˀ jiḥah neˀ Johnˀ that he.animal.bought.it dog NE John
‘John bought THAT dog.’

b. * thó:gęh sǫh waˀęnasgwahnínǫˀ jiḥah?
that who she.animal.bought.it dog
(‘Who bought THAT dog?’)

Incompatible with wh-movement (focus-fronting – i.e., from argument position)

Interrogative determiner also part of DP (Onondaga, Barrie 2015)

(13) a. Gaęnigaeˀ wa’enasgwahní:nǫˀ?
kaęnikâe’ wa’- s- naskw- a- hniq’- 2
which FACT- 2.SG- animal- JOIN- buy- PUNC
‘Which animal did you buy?’

b. nwadę’ wa’snasgwahní:nǫˀ
wadę’ wa’- s- naskw- a- hniq’- 2
what FACT- you- animal- JOIN- buy- PUNC
‘What did you buy?’ (kind of animal presupposed)

c. gaęnigáeˀ gwíhsgwihs wa’enasgwahní:nǫˀ
kaęnikâe’ kwíhskwíhs wa’- s- naskw- a- hniq’- 2
which pig FACT- 2.SG- animal- JOIN- buy- PUNC
‘Which pig did you buy?’
d. gaęnigáeˀ waˀsnasgwahní:nǫˀ gwíhsgwihs
kaęnikáeˀ  waˀF sF naskwF  aF hninǫF ˀ kwihskwihs
which FACT- 2.SG- animal- JOIN- buy- PUNC pig
‘Which pig did you buy?’ (from field notes)

e. Gaęnigaeˀ  gwíhsgwis  shé:heˀ  Mary  waˀenasgwahní:nǫ ˀ?
which pig you.think Mary she.animalFbought.it
‘Which pig do you think Mary bought?’

➢ last example: long-distance movement of [which pig] ➔ constituent
➢ Dem, Quant, which form a constituent with N
➢ left-branch extraction possible

1.3 Articles

➢ The form ne(ʔ?) roughly means “the” (Mithun 2015) – found in all Northern Iroquoian lg’s
➢ Mithun: means “the aforementioned X”
➢ Takes wide-scope wrt repetitive (iterative) marker (Barrie 2014)

(14) a. John asha:hyak swahó:waˀ [Cayuga]
John a-s-ha-ahy-a-k-Ø swahó:waˀ
‘John ate an apple again.’ [a different apple]

b. John asha:hyak neˀ swahó:waˀ
John a-s-ha-ahy-a-k-Ø neˀ swahó:waˀ
‘John ate an apple again.’ [must be the same apple ➔ absurd reading]

➢ syntax unclear

context: focus on 1st person: “You know Mary ate someone’s apple. You want to know whether she ate your apple in particular.”

(15) Mary geh aˀqhyak neˀ i: aga:wéh ohyaˀ [Cayuga]
Mary kēh aˀ-q-hya-k-Ø neˀ i: ak-awéh ohyaˀ
‘Did Mary eat my apple?’

➢ article appears with focussed pronoun
context: “I know Mary ate something of yours, so I ask if she ate your apple. You respond that she ate your banana.”

(16) Thęh, neˀ neˀ onaˀgáˀ? neˀ aˀ:e:k    [Cayuga]
    Thęh neˀ neˀ onaˀgáˀ neˀ aˀ-e-k-Ø
    no NE NE banana NE FACT-3.SG.F.AG-eat-PUNC
    No, she ate (my) banana.’

➤article can be doubled and can appear on verbs

➤article can appear before the demonstrative

(17) John ahahní:nǫˀ neˀ nęgyęh gwihsgwihs    [Cayuga]
    John a-ha-hnínǫˀ neˀ nęgyęh gwihsgwihs
    John FACT-he-buy-PUNC NE DEM pig
    ‘John bought this pig.’

➤article can appear after quantifier

(18) Mary aˀesˀah gweːgǫh neˀ ohyāˀ    [Cayuga]
    Mary she.ate all NE apple
    ‘Mary ate up every apple.’

➤order must be NE + N

(19) a. Mary aˀesˀah neˀ ohyāˀ    [Cayuga]
    Mary she.ate NE apple
    ‘Mary ate the apple.’

b. * Mary aˀesˀah ohyāˀ neˀ    [Cayuga]
    Mary she.ate apple NE
    (‘Mary ate the apple.’)

➤Although demonstratives and quantifiers may have variable order wrt the noun and to NE, the article NE must (it seems) appear before the noun.

➤NE seems to be an extremely good candidate for D.

1.4 Discussion

➤Evidence for extended clausal projection: CP > TP > vP > VP (Baker 1996; Barrie et al. 2014)

➤Evidence for DP/extended nominal projection?

➤general agreement that CP mirrors DP/KP (Grimshaw 1990; Megerdoomian 2008; Ogawa 2001; Wiltschko 2014)
Projection of features/labelling (“virtual” Iroquoian shown)

(20) a. DP analysis  

\[
\begin{array}{c}
\text{DP} \\
\text{which} \\
\text{D'} \\
\text{D} \\
\text{NP} \\
\text{pig}
\end{array}
\]

b. NP analysis  

\[
\begin{array}{c}
\text{NP} \\
\text{which} \\
\text{NP} \\
\text{pig}
\end{array}
\]

\text{[wh]-movement: can move either ‘which’ or ‘which pig’ -> [wh] feature must appear on DP}

\text{NP analysis – could claim that [wh] feature ‘percolates’ to NP}

\[
= [\text{wh}] \text{ feature projects and determines label}
\]

\text{consistent order which + N -> argues against adjunction structure in (20)b.}

\text{Distinguishing adjunction from projection (Wiltschko 2008; Wiltschko 2014)}

\text{Marker is obligatory for interpretation -> marker projects}

\text{Absence of marker indicates absence of marked value -> marker projects}

\text{Absence of marker gives rise to vague meaning -> marker adjoins}

\text{English number projects}

(21) the dogs – plural meaning only

the dog – singular meaning only (lack of plural does not mean lack of number)

\text{Halkomelem number adjoins (Wiltschko 2008)}

(22) a. te lhixw swiweles

\text{DET three boy.sg}

‘the three boys’

b. te lhixw swóweles

\text{DET three boy.pl}

‘the three boys’

\text{number marker (here ablaut) is not required for a plural interpretation}
Recall (19) above: NE required for “aforementioned” reading

D projects

NE appears to be a head

\[ \text{labelling algorithm, head must project (Chomsky 2013; Ott 2014)} \]

\[ (23) \]

\[
\begin{array}{c}
\text{DP} \\
\text{D} \\
\text{NP} \\
\text{neʔ} \\
\text{swahó:waˀ} \\
\text{apple} \\
\end{array}
\]

some details remain, evidence for the following structure:

\[ (24) \quad \text{QP} > \text{DP} > \text{ AgrP } > \text{nP} > \text{NP} \]

recently discussed problems with DP (Bruening 2009; Salzmann 2018)

V selects type of CP (declarative, interrogative, subjunctive, etc.)

V does not select for type of DP – definite, possessed, etc.

D is not the highest functional projection. K is. Many verbs do select for particular kinds of K.

Likewise, V does not select for particular kinds of T (past only) or particular Asp.

2 Parametric Variation

Language variation captured by parameters

Parameters must be learnable in order to explain language phenomena (see also Jeong 2016)

2.1 Macroparametric approach

consolidates several phenomena

NP/DP Parameter (Bošković 2005; Bošković 2008)

Phenomena (consider two here)

a. Only languages without articles may allow left-branch extraction
b. Polysynthetic languages do not have articles

- Polysynthesis Parameter (Baker 1996)

Phenomena (consider three here)

- a. syntactic noun incorporation
- b. no true quantifiers
- c. no true determiners

- Morphological Visibility Condition (informal): V assigns theta-role (and hence Case) to a morpheme inside the verb (either agr or an incorporated noun).

- Therefore, no DP/NP in argument position (at S structure) in polysynthetic languages.

2.2 Evaluating the NP/DP Macroparameter

- left-branch extraction

- clear evidence for LBE in Northern Iroquoian

- Also found in French and Squamish (languages with determiners)

  (25) Combien as-tu lu de livres? [French; hyphen is orthographic]

  how.many have-you read of books

  ‘How many books did you read?’

- Some polysynthetic languages are known to have determiners (Gillon 2013; Wiltschko 2014).

  (26) a. Chen tákw-an ta stákwa. [Squamish, (Gillon 2009)]

  1SG.S drink-TR DET water

  ‘I drank the water’ (vague wrt location)

  b. Chen tákw-an ti stákwa.

  1SG.S drink-TR DET water

  ‘I drank the water’ (water near speaker).

- Northern Straits Salish (closely related to Squamish) allows LBE (Davis 2013; Jelinek 1984)

  (27) makw ?aw-ʔaq cə=sp eqəŋ

  all link-white det=flower

  ‘All the flowers are white.’ / ‘The flowers are all white.’

- We showed above that Northern Iroquoian has a determiner → prototypical polysynthetic language.
Sufficient evidence from North America that DET = no LBE claim is not universal.

2.3 Evaluating the Polysynthesis Macroparameter

- syntactic noun incorporation (NI)
- N undergoes head movement to V
- no DP or HMC would be violated (Travis 1984)

\[
\begin{align*}
(28) & \quad \text{a.} & \quad \text{b.} \\
& \quad \text{S} & \quad \text{VP} \\
& \quad \text{S} & \quad \text{NP} \\
& \quad \text{VP} & \quad \text{NP} \\
& \quad \text{V} & \quad \text{NP} \\
& \quad \text{N} & \\
\end{align*}
\]

- DP double adjoined to S (CP)

(29) \[\text{waˀgnsagwahni:noŋ neŋ gwihs} \quad \text{[Onondaga]} \]
\[\text{waˀ- k- naskw- a- hnoŋ- neŋ kwihskwihs} \]
\[\text{FACT- 1.SG.NOM - animal- EPEN- buy- PUNC NE pig} \]
\[\text{‘I bought pig.’} \]

- Existence of DP not necessarily fatal for the syntactic analysis of NI

- V takes bare NP as a complement; full DP is adjoined to CP

- Following data are more challenging:

(30) \[\begin{align*}
\text{a.} & \quad \text{nwadęˀ waˀgnsagwahni:noŋ} \\
\text{nwadęˀ} & \quad \text{waˀ- s- naskw- a- hnoŋ- ?} \\
\text{what} & \quad \text{FACT- you- animal- JOIN- buy- PUNC} \\
\text{‘What kind of animal did you buy?’} \\
\text{b.} & \quad \text{gaëniqáeˀ gwihs} \quad \text{waˀgnsagwahni:noŋ} \\
\text{kaëniqáeˀ} & \quad \text{kwihskwihs waˀ- s- naskw- a- hnoŋ- ?} \\
\text{which pig} & \quad \text{FACT- 2.SG- animal- JOIN- buy- PUNC} \\
\text{‘Which pig did you buy?’} \\
\end{align*}\]
c. Gaęnigaeˀ gwíhsgwis shé:heˀ Mary wa’enasgwahni:nǫʔ?
   which pig you.think Mary she.animal-bought.it
   ‘Which pig do you think Mary bought?’

➢ More to the point: Is DP possible in an adjoined position?

➢ Presence/absence of determiners must be treated with care in examining polysynthetic languages.

➢ Quantifiers cannot appear clause-externally (when a wh-phrase is present)

➢ wh-XP in SpecCP, so quantifier is internal

(31) Dęˀhoˀdęˀ gaegwe:goŋ agaehninonyoʔ?
    what they.all they.bought.it
    ‘What did they all buy?’

(32) *Gaegwe:goŋ dęˀhoˀdęˀ agaehninonyoʔ?
    they.all what they.bought.it
    (‘What did they all buy?’)

➢ Q enters scopal relations with wh-XP

(33) dęhoˀdęˀ gwe:goŋ ahadik?
    what all they.ate
    ‘What did everyone eat?’
    what > all OR all > what

    possible answers: i. Everyone ate an apple.
    ii. John ate an apple, Mary ate an orange, …

➢ It seems quantifiers can exist in argument position

➢ Proposal: Northern Iroquoian NI is syntactic, but can tolerate DP in argument position.

➢ Brief excursus: type III and type IV NI (Baker et al. 2005; Barrie 2015; Mithun 1984; Rosen 1989)

   type III – “compounding” no doubling or stranding, V becomes intransitive

   type IV – “classifier” doubling/stranding permitted, V is still transitive

➢ Northern Iroquoian – type IV

➢ proposal (based on Barrie, 2015):

   type III: V takes nP as a complement
   type IV: V takes [nP DP] as a complement
Alternative to Macroparameters

Chomsky-Borer Conjecture holds that cross-linguistic variation is restricted to the lexicon (Kayne 2005).

Fails to account for strong cross-linguistic tendencies (VO – prepositions; OV – postpositions)

Intermediate approach: microparameters are hierarchically arranged, giving rise to tendencies, rather than to all-or-nothing macroparameters (Biberauer & Roberts 2015; Roberts 2016).

Is the head-final feature present on all heads?

Yes – head-final (Korean, Japanese, etc.)

No: Is the head-final feature present on no heads?

Yes – head-initial (Celtic, Romance)

No: Is it present on [+V] categories?

Yes – German SOV

No: etc.
3 Discussion

➢ Dissociate D head from macroparameters

➢ Make room for variation (with or without D, etc)

➢ Should the order of macroparameters (in the sense of Roberts) somehow mirror acquisition?

➢ We need to account for difference in type III and type IV noun incorporation

➢ Possible microparameters:

  Does np associate with a prosodic boundary? [children acquire prosody early]

  Yes – np can be free: pseudo NI - (Massam 2001), but see (Clemens 2014)

  No – np is bound (NI may boil down to prosodic constraints, Richards 2016)

  Can V take np as a complement?

    No – no NI (but DP is morphologically complex)

    Yes – type III NI

  Can np appear with DP in a small clause?

    Yes – type IV NI

➢ Conclusions?

➢ NP/DP Macroparameter must be loosened to allow for the presence of determiners and LBE in one and the same language.

➢ Polysynthesis Parameter must be loosened to account for DPs in argument position.

➢ Cross-linguistic, typological studies in language variation/parameterization must start from an in depth understanding of a small number of languages/families (Davis et al. 2014; Matthewson 2011)

  → NP/DP Parameter: Slavic lg’s

  → Polysynthesis Parameter: Mohawk

  → typological studies require true research collaboration

References


Bruening, Benjamin. 2009. Selectional Asymmetries between CP and DP Suggest that the DP Hypothesis is Wrong (ed.) U.o. Delaware.


incorporation in Iroquoian and Mapudungun. Baker et al. propose that cross-linguistic differences in noun incorporation constructions results from differential modes of deletion of $\Phi$-features from the copies of moved elements. The current study outlines various empirical and theoretical problems with their analysis and proposes instead a structural analysis that captures a wider range of empirical facts. We propose that in Iroquoian languages the incorporated noun and the full DP double form a constituent upon Merge, while in Mapudungun they do not. We then derive the differences in noun inco In Northern Iroquoian languages, a nominalizer (nlzr) is typically required to transform a verb into a noun, either for noun incorporation or to create a full DP. In some cases, the nominalizer is required only for noun incorporation and not for the formation of a DP. Interestingly, the converse is never found. That is, there are no lexical roots that require the nominalizer for the formation of a DP, but not for noun incorporation. The engrossing tales in Glimpses of Oneida Life will be a valuable resource for linguists and language learners, a useful source for those studying the history and culture of Iroquois people in the twentieth-century, and an entertaining read for anyone interested in everyday First Nations life in southern Ontario. Language variation is a political issue, which is treated in § 6.5 Language policy in Asia and Africa. 7.1.1 Linguistic items and varieties. Sociolinguists in most cases study social distribution of particular linguistic items, for example words, sounds, or grammatical constructions. The most important ones are found in (i) northern Senegal and southern Mauritania, (2) Guinea, (3) Mali, (4) Burkina Faso, western Nigeria, and western Niger, (5) central Nigeria, and (6) eastern Nigeria and northern Cameroon. When speakers from neighboring dialect areas meet, they can communicate with each other without problems, each one her or his native variety. Iroquoian languages. Quite the same Wikipedia. Just better. Today, all surviving Iroquoian languages except Cherokee in Oklahoma and Mohawk are severely endangered or critically endangered, with only a few elderly speakers remaining. Cherokee in North Carolina is considered severely endangered.[3][4]. YouTube Encyclopedic.