

Syntactic roots: Evidence from Algonquian

Sigwan Thivierge

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Roadmap

- Individuating roots
- The syntax of the Nishnaabemwin verbal stem
- Roots are syntactic: Evidence from Nishnaabemwin

1 Why roots?

- Marantz (1995):
 - ‘Core’ element that the lexical item is built around
 - For example: the common element to *destroy* and *destruction*
 - Phonological and encyclopedia differences between DOG and CAT are not relevant for the syntactic derivation; both are [+COUNT], etc.
 - Syntactically indistinguishable; communicative choice of /dag/ vs. /kæt/ is at Spell-Out
- However, root suppletion suggests that this can’t quite be the story
 - Thought experiment: [haʊnd] is a suppletive form of √DOG in the context of [+PLURAL]
 - [+COUNT, +ANIMATE, ...] → [haʊnd] / ___ [+PLURAL]
 - Prediction: [haʊnd] will surface in all [+PLURAL] contexts
 - This is not what actually happens; the prediction is too strong
- Harley: Hiaki (Uto-Aztecan) has root suppletion, and so the original conception of roots cannot be maintained
 - Roots need to be individuated even in the narrow syntax
 - So – how are they individuated?

1.1 Are roots semantic?

- No.¹ Certain elements are meaningless outside of their morphosyntactic environments:
 - *kit* and *caboodle*, in *cahoots*, *run the gamut*, ...
 - *receive*, *deceive*, *conceive*, *perceive*, ...
 - This can’t be a case of accidental homophony since they show similar patterns of contextual allomorphy:
 - *reception*, *deception*, *conception*, *perception*, ...
- Roots are not semantically individuated

1.2 Are roots phonological?

- There IS a common element in *-ceive* ~ *-ception* → /siv/
 - If /siv/ is what’s susceptible to contextual allomorphy, then perhaps roots may be individuated phonologically
 - What does this mean for *go* ~ *went*?
 - If roots are phonologically individuated, then they have to be two different roots; they don’t share any phonological information
 - Complementary gaps in their respective paradigms must therefore be accidental
 - But, they participate in the same idioms; unexpected if they aren’t the same linguistic object
 - This leads to the conclusion that they are two surface manifestations of the same linguistic object
- Roots are not phonologically individuated

¹Re: Roots aren’t individuated by *conceptual* information.

1.3 Are roots syntactic?

- Harley's (2014) argument:
 - Hiaki has verbal suppletion based on the number features of the internal argument
 - Hiaki does not have object agreement
 - Therefore, any triggers for suppletion must be based on a head-complement relation
- Suppletive Hiaki roots are conditioned by number features of the (i) transitive object

- (1) a. Aapo/Vempo uka **koowi-ta** mea-k
 3.SG/PL the.SG pig-ACC.SG kill.SG-PRF
 'He/they killed the **pig**.'
- b. Aapo/Vempo ume **kowi-m** sua-k
 3.SG/PL the.PL pig-ACC.PL kill.PL-PRF
 'He/they killed the **pigs**.'

- And the number features of the (ii) intransitive subject

- (2) a. **Aapo** weye
 3.SG walk.SG
 '**She/he/it** is walking.'
- b. **Vempo** kaate
 3.PL walk.PL
 '**They** are walking.'

- The Hiaki case is therefore like *go ~ went*, but:
 - Based on NUMBER rather than TENSE
 - More common in the language (~ dozen verbs)
- Thus, Hiaki provides further evidence that roots cannot be individuated phonologically
 - If not semantically, and not phonologically, then ...

→ Roots are syntactically individuated

2 The Algonquian verbal complex

- The Nishnaabemwin verb is comprised of at least two parts:
 - An *initial*, an acategorial root (see Brittain 2003, Hirose 2003, Slavin 2012, *i.a.*)
 - A *final*, which (i) encodes information about transitivity (T/I) and animacy (A/I), and (ii) has categorizing properties (Brittain 2003, Hirose 2003, Branigan et al. 2005, Piggott & Newell 2006, Mathieu 2007, Slavin 2012)
- Four major verb classes: TA, TI, AI, II
- The initial/root **wa-p-* 'light, vision' combines with the four finals (Proto-Algonquian; Oxford 2017, from Bloomfield 1946)
 - The AI final *-i* marks the animate subject
 - The II final *-an* marks the inanimate subject
 - The TA final *-am* marks the animate object
 - The TI final *-ant* marks the inanimate object

(3)	INITIAL	FINAL		STEM	GLOSS
	<i>*wa-p-</i>	<i>-i</i>	AI	'do/be _{ANIM} '	<i>*wa-pi-</i> 'to look on' (animate)
	<i>*wa-p-</i>	<i>-an</i>	II	'do/be _{INAN} '	<i>*wa-pan-</i> 'to dawn' (inanimate)
	<i>*wa-p-</i>	<i>-am</i>	TA	'do to _{XANIM} '	<i>*wa-pam-</i> 'to look at someone'
	<i>*wa-p-</i>	<i>-ant</i>	TI	'do to _{XINAN} '	<i>*wa-pant-</i> 'to look at something'

- Nishnaabemwin verbs has subject and object agreement morphology

(4)	PREFIX	INITIAL	FINAL	THEME SIGN	INNER SUFFIX	OUTER SUFFIX
	DC	√ ⁰	v ⁰	Voice ⁰	Inf ⁰	DC
	ni-	waab	-am	-aa	-naan	-ag

'We see them_{anim.}'

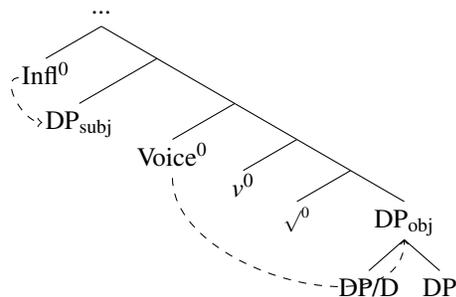
- Prefix **ni-**, inner suffix **-naan** → **1st person plural subject**
- Theme sign **-aa**, outer suffix **-ag** → **3rd person plural object**

- The *theme sign* has received a lot of attention in recent years
 - Analyses range from fused subject–object features (e.g. Lochbihler 2012) or object agreement alone (e.g. Oxford 2014)
 - Either way, we can be pretty sure that they—and the inner suffix—are reflexes of Agree in ϕ -features
 - Evidence → fixed positions of exponence; tense-variant forms (Oxford 2014)
- The *prefix* and *outer suffix* have been argued to be doubled clitics
 - Evidence → word-initial/-final positions, respectively; tense-invariant forms (Oxford 2014)
- Recent research on doubled clitics has independently shown that clitic doubling is preconditioned by Agree (e.g. Béjar & Rezac 2003, Rezac 2008, Preminger 2011, *a.o.*)
 - These two lines of research suggest that the outer suffix *-ag* is a doubled clitic, a reflex of (minimally) object agreement exponed in the so-called theme sign slot

SUMMARY:

- | | |
|----------------------------------|----------------------|
| • Agree in ϕ -features: | • Doubled clitics: |
| <i>-aa</i> → object agreement | <i>-ag</i> → object |
| <i>-naan</i> → subject agreement | <i>ni-</i> → subject |

(5)



3 Roots are syntactic

- Novel evidence from suppletive $\sqrt{\text{EAT}}$; surface forms are conditioned by the animacy (i.e. gender) of the object
 - *amw-* appears with an ANIMATE object
 - *miijin-* appears with an INANIMATE object
- Forms of the plural markers on nominals, verbs are also based on the animacy of the object
 - *-ag* appears with an ANIMATE object
 - *-an* appears with an INANIMATE object

- (6) a. **miskomin-ag** **ni-gii-amw-aa-ag**
 raspberry.ANIM-ANIM.PL 1-PST-eat.TA-DIR-ANIM.PL
 'I ate raspberries.'
- b. **miin-an** **ni-gii-miijin-Ø-an**
 blueberry.INAN-INAN.PL 1-PST-eat.TI-TI3-INAN.PL
 'I ate blueberries.'

→ Animacy conditions suppletive forms and interacts with agreement and clitic doubling processes

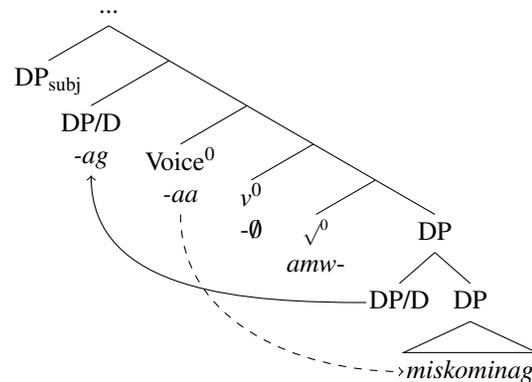
3.1 Derivation with animate vs. inanimate objects

- The surface forms of $\sqrt{\text{EAT}}$ directly follow from a structure where the root merges directly with the object
 - HEAD–COMPLEMENT RELATION
 - Root 'suppletion' is a maximally local case of contextual allomorphy
- As in standard accounts, the ϕ -features of the object are accessible
 - The object is an accessible goal for a [ANIMATE]-bearing probe on $\text{Voice}^0 \rightarrow$ object agreement
 - Subsequent clitic doubling expones the number features of the object; surface forms are also conditioned by its animacy feature

ANIMATE OBJECT:

- (7) **miskomin-ag** **ni-gii-amw-aa-ag**
 raspberry.ANIM-ANIM.PL 1-PST-eat.TA-DIR-ANIM.PL
 'I ate raspberries.'

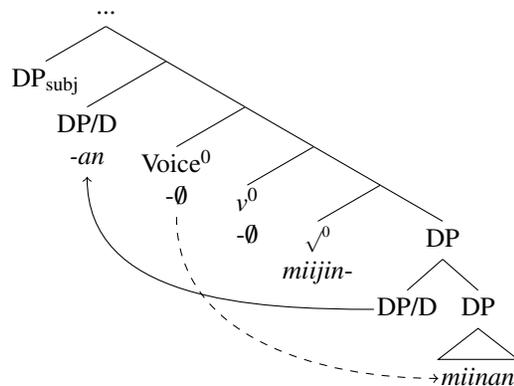
(8)



INANIMATE OBJECT:

- (9) **miin-an** **ni-gii-miijin-∅-an**
 blueberry.INAN-INAN.PL 1-PST-eat.TI-TI3-INAN.PL
 'I ate blueberries.'

(10)



4 Conclusion

- The animacy features of objects triggers:
 - i. Suppletion in Nishnaabemwin roots *amw-* ~ *miijin-*
 - ii. Allomorphy in the plural markers *-ag* ~ *-an*
 - Animacy conditions suppletive forms and interacts with agreement and clitic doubling processes
 - This behaviour provides evidence in favour of Harley's approach that roots are syntactic
 - Borer's (2014) major counterargument to the Hiaki data:
 - Pluractionality explains the alternations (e.g. English *scatter* ~ *drop*; the former, but not the latter, implies plural object)
 - We need independent evidence that Hiaki verbs are sensitive to the number features of their complements outside of the root alternations
 - There is no such evidence in Hiaki
 - Borer concludes that its number-conditioned verb suppletion is not actually suppletion nor representative of a root-complement constituent
 - This project: I've shown you that objects ARE grammatically active in Nishnaabemwin
- Roots are syntactically individuated

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