

## Person-based alignment in Algonquian: voice, agreement, or both?

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**Proposal.** In this talk I argue that the “inverse” verb morphology of the Algonquian languages, which is conditioned by a person hierarchy (cf. Zubizarreta & Pancheva 2017 on Paraguayan Guarani), occurs in two distinct morphosyntactic environments:

- **Environment 1: Inverse morphology reflects inverse syntax**

Inverse morphology appears when the patient is mapped to the structural subject position.

- **Environment 2: Inverse morphology without inverse syntax**

Inverse morphology appears when the patient is not mapped to the structural subject position, but is *agreed with* as though it were the subject.

If we regard Environment 1 as a passive-like voice construction (Wolfart 1991), then Environment 2 can be described as a context in which passive-like morphology appears *spuriously*, in the absence of passive-like syntax, conditioned by purely morphological factors. From this viewpoint, Algonquian inverse morphology patterns similarly to Chukchi antipassive morphology, which occurs in clauses that are syntactically antipassive (parallel to Environment 1) but also in certain other contexts (parallel to Environment 2, dubbed the “Chukchi Spurious Antipassive” by Hale 2002). Recognizing two distinct morphosyntactic sources for inverse morphology allows us to explain two facts that are not adequately captured by existing formal analyses that treat all inverse forms in the same way (e.g. Brittain 1999; McGinnis 1999; Béjar & Rezac 2009; Lochbihler 2012; Oxford 2017; Despić & Hamilton 2017): (a) the Environment 1 inverse is invariant across the entire Algonquian family while the Environment 2 inverse varies extensively in its conditioning both across and within languages; and (b) there is syntactic evidence that the patient c-commands the agent in Environment 1 inverse forms but not in Environment 2 forms. The overall lesson is that, even within a single language, there can be variation in the degree to which person-based *morphological* alignment correlates with person-based *syntactic* alignment.

**Environment 1.** All Algonquian languages show an alternation between the two transitive constructions shown for Menominee in (1). The two constructions are thematic paraphrases, both meaning ‘the woman sees the man’, but their morphosyntax differs. In the default “direct” construction in (1a), the agent ‘the woman’ is realized with “proximate” inflection and is indexed by the “central agreement” suffix on the verb (-w ‘3sg.PX’); the preceding “theme sign” suffix indexes the object (-æ: ‘3OBJ’). In the marked “inverse” construction in (1b), it is instead the patient ‘the man’ that is realized with proximate inflection and indexed by central agreement on the verb, and the verbal theme sign suffix is realized as a special inverse marker -ekw rather than indexing the object.

- (1) a. næ:wæ:w enoh metæ:moh anenoh enæ:niwan  
næ:w -æ: -w [enoh metæ:moh -Ø] [anenoh enæ:niw -an ]  
see -3OBJ -3SG.PX [that.PX woman -PX] [this.OBV man -OBV]  
‘The woman sees the man.’
- b. niak enoh enæ:niw anenoh metæ:mohsan  
næ:w -ekw -w [enoh enæ:niw -Ø] [anenoh metæ:mohs -an ]  
see -INV -3SG.PX [that.PX man -PX] [this.OBV woman -OBV]  
‘The woman sees the man.’ (Bloomfield 1962:39)

This pair of sentences can be described as showing a voice alternation (Wolfart 1991): the default voice in (1a) maps the *agent* to subject position while the inverse voice in (1b) maps the *patient* to subject position. The subjecthood of the patient in (1b) is indicated by its morphological properties (marked with proximate inflection, indexed by central agreement), its pragmatic properties (more topical than the agent), and, importantly, its syntactic properties: there is evidence from variable binding that in an inverse clause, the patient

c-commands the agent (Bruening 2001, 2005; cf. Bliss 2005), and in Ojibwe and East Cree, the inverse reverses the default word order of the agent and patient DPs (Rhodes 1994; Junker 2004).

**Environment 2.** All Algonquian languages show the inverse voice alternation in (1) in clauses involving two third-person arguments. Most Algonquian languages also show inverse morphology in certain contexts in which the patient is a speech-act participant (SAP). These additional inverse forms differ from the inverse form in (1b) in three ways: 1) they do not alternate with a thematically equivalent default form; 2) there is no syntactic evidence that the patient c-commands the agent; and 3) their distribution varies extensively across the languages. The table in (2) gives a synopsis of the variation in “conjunction” verb forms in which a non-SAP acts on a SAP. All variation involves diachronic extension of inverse morphology to forms that were not originally marked as inverse in Proto-Algonquian, and, as is evident from the table, the many attested patterns fall along a “staircase” cline conditioned not only by the *person* of the SAP patient, as in a prototypical inverse system (e.g. Zubizarreta & Pancheva 2017), but also by its *number*, as well as the status of the agent as inanimate (‘it sees...’), impersonal (‘people see...’), or animate (‘s/he sees...’).

(2) Variation in inverse marking in conjunct forms with SAP patients

LANGUAGE		MORPHOLOGY IN CONJUNCT FORMS WITH SAP PATIENT											
		‘it sees...’				‘people see...’				‘s/he sees...’			
		2pl	1pl	2sg	1sg	2pl	1pl	2sg	1sg	2pl	1pl	2sg	1sg
CENTRAL	Proto-Algonquian, Kickapoo	—	—	—	—	—	—	—	—	—	—	—	—
	Meskwaki	INV	INV	INV	INV	—	—	—	—	—	—	—	—
	Menominee, Ojibwe, Cree	INV	INV	INV	INV	INV	INV	INV	INV	—	—	—	—
	Northern Algonquin, Woods Cree	INV	INV	INV	INV	INV	INV	INV	INV	INV	—	—	—
	Parry Island Ojibwe, Plains Cree	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	—	—
	Alternative Parry Island Ojibwe	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV
EASTERN	Passamaquoddy, Mi'kmaq 1	—	—	—	—	—	—	—	—	—	—	—	—
	Mi'kmaq 2	INV	—	—	—	INV	—	—	—	INV	—	—	—
	Mi'kmaq 3	INV	INV	—	—	INV	INV	—	—	INV	INV	—	—
	Delaware	INV	INV	INV	—	INV	INV	INV	—	INV	INV	INV	—
	Massachusetts	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV

**Analysis.** I propose that in spite of its heterogeneous syntactic underpinnings, the Algonquian inverse has a unified morphological analysis: inverse morphology appears whenever *T* agrees only with the patient (as formalized in Oxford 2017, to appear; cf. Zubizarreta & Pancheva 2017). There are two ways that this configuration can arise. In an Environment 1 inverse, a passive-like transformation demotes the agent and promotes the patient to subject position; this leaves *T* with no choice but to agree with the patient, thus making the appearance of inverse morphology inevitable and invariable. In an Environment 2 inverse, on the other hand, *T* is not forced by a voice construction to agree only with the patient; rather, it does so simply because the phi-features of the patient are a better match for the probe on *T* than those of the agent. The distribution of the Environment 2 inverse will thus vary depending on exactly how the probe on *T* is specified: does it probe for person only, or for more specific person features such as [participant] (as in Béjar & Rezac 2009), or for number as well (as in Coon & Bale 2014)? I will show how an analysis along these lines can derive the full range of variation in (2), and I will consider the degree to which this analysis can be reconciled with the “interpretable person” proposals of Ritter & Wiltschko 2014 and Zubizarreta & Pancheva 2017.

**SELECTED REFERENCES.** Béjar & Rezac 2009. Cyclic Agree. *Linguistic Inquiry* 40: 35–73. • Bloomfield 1962. *The Menomini language*. • Bruening 2001. Syntax at the edge: Cross-clausal phenomena and the syntax of Passamaquoddy. MIT diss. • Coon & Bale 2014. The interaction of person and number in Mi'gmaq. *Nordlyd* 40.1: 85–101. • Hale 2002. Eccentric Agreement. In *Kasu eta Komunztaduraren gainean*. • Oxford 2017. Inverse marking as impoverishment. *WCCFL* 34: 413–422. • Oxford to appear. Inverse marking and Multiple Agree in Algonquian: Complementarity and variability. *NLLT*. • Ritter & Wiltschko 2014. The composition of INFL: An exploration of tense, tenseless languages, and tenseless constructions. *NLLT* 32:1331–1386. • Wolfart 1991. Passives with and without Agents. In *Linguistic studies presented to John L. Finlay*. • Zubizarreta & Pancheva 2017. A formal characterization of person-based alignment: The case of Paraguayan Guarani. *NLLT* 35:1161–1204.