

Locality via feature inheritance: contextual allomorphy in Ojibwe theme-signs

Theoretical work on the independent and conjunct orders in Algonquian languages has concentrated on morphological, syntactic and semantic differences between these orders at the clausal level. Here, we concentrate on differences between these orders concerning the spell-out of an agreement morpheme in the verbal template, namely the theme-sign. In particular, we argue that the Vocabulary Insertion (VI) rules for *v*, which spell out the theme-sign, indirectly make reference to the featural content of *C*, which is not local enough to *v* to be included in the context of *v*'s VI rules. However, since *C* transmits some of its features to *T* and *T* is local to *v*, the VI rules make reference to the featural content of *T*, thereby indirectly establishing the necessary relation between *v* and *C*.

Algonquian languages have several different verbal orders, which are characterized by different syntactic and semantic properties and different verbal morphology. Previous work on different verbal orders has focussed on morphological, syntactic and semantic differences at the clausal level. For example, Lochbihler and Mathieu (2016) propose that in Ojibwe, the complementizer (*C*) in independent clauses introduces φ -features while *C* in conjunct clauses introduces discourse-features. This accounts for the presence of person proclitics and the absence of initial change (analyzed as *wh*-agreement) in independent clauses and the absence of person proclitics and the presence of initial change in conjunct clauses. (See also Campana 1996 (mostly) on Passamaquoddy-Maliseet and Brittain 1997 on Sheshatshit Montagnais). As another example, in studying the contexts of usage of independent vs. conjunct clauses in Plains Cree, Déchaine et al. (2017) conclude that independent *C* bears presentative illocutionary force, whereas conjunct *C* bears assertive force. Importantly, a common conclusion of research on independent and conjunct clauses is that the differences between verbal orders in Algonquian are a matter of clause-typing (via the features of *C*).

Another difference between the independent and the conjunct, which has only been implicitly recognized as a theoretical puzzle, concerns differences in the spell-out of an agreement morpheme in the template of transitive verbs, namely the theme-sign. This morpheme indicates the relation between the person features of the subject and the object. As an illustration, observe the difference in the theme-sign (underlined) between the independent and conjunct morphology in Ojibwe in (1) vs. (2), respectively.

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| <p>(1) nwaabmig
 n-waabm-<u>ig</u>
 1-see.VTA-TS
 ‘he/she sees me’</p> | <p>(2) waabmid
 waabm-<u>i</u>-d
 see.VTA-TS-3
 ‘he/she sees me’</p> |
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For a more complete picture, these tables present the theme-signs for each possible subject-object person feature combination (3' represents the obviative and 3, the proximate).

Ojibwe independent VTA theme-signs					
Subject \ Object	1	2	3	3'	
	1	2	3	3'	
1	—	in	aa	aa	
2	i	—	aa	aa	
3	igw	igw	—	aa	
3'	igw	igw	igw	—	

Ojibwe conjunct VTA theme-signs					
Subject \ Object	1	2	3	3'	
	1	2	3	3'	
1	—	in	aa	aa	
2	i	—	aa	aa	
3	i	in	—	aa	
3'	i	in	igw	—	

To account for these morphological differences between the verbal orders and assuming that v spells out the theme-sign, Lochbihler (2012) proposes two distinct types of v , v_{IND} and v_{CONJ} , each with its own set of VI rules, and notes that “these types relate to C” (p. 89). Indeed, a truly explanatory theory should seek to relate both the clause-level differences and the differences in verbal morphology between the orders to a common source, namely the nature of C. The problem, of course, is that it is not clear how v should formally be related to C. It is precisely this relation that the present work wishes to address.

Assuming a Distributed Morphology model, referencing the content of C in the v VI rules amounts to including C in the context of the rules. However, studies on contextual allomorphy (e.g., Embick, 2010; Ostrove, 2016) conclude that C is not local enough to v to be included in its VI rules. We therefore find ourselves facing the following dilemma: the nature of C seems to condition the allomorphy of v but C is not local enough to v to trigger such allomorphy. Our solution is to relate v to C indirectly, by feature inheritance from C to T, T being local enough to v to trigger its allomorphy.

Examining the paradigms in the tables presented above, it is clear that person features of both the subject and the object must be identified in order to determine which theme-sign will be inserted into v . Assuming a standard model of Agree, v ’s φ -features are valued by the object and T’s φ -features are valued by the subject. Therefore, as Oxford (2014) argues, the v VI rules must make reference to the featural content of T. Following Chomsky (2008), T does not inherently bear φ -features; rather, these features are borne by C and derivationally transmitted to T. We propose that since the very features of T that the v VI rules include in their context originate on C, then an indirect relation is thus established between v and C (via T). This indirect relation suffices to trigger contextual allomorphy on v .

This proposal is compatible with a number of specific models of theme-sign insertion, including Oxford 2014, and we have deliberately remained agnostic regarding this issue. Importantly, however, a certain class of models are not compatible with the current proposal. In particular, those based on Cyclic Agree where v agrees with both the subject and the object (e.g., Béjar and Rezac, 2009; Lochbihler, 2012) cannot be maintained, since there is no relation between v and T in these models, and consequently no indirect relation between v and C.

Béjar, Susana and Milan **Rezac**. 2009. Cyclic Agree. *LI* 40: 35–73. **Brittain**, Julie. 1997. The conjunct verb in Sheshatshit Montagnais. *CJL* 42: 253–284. **Campana**, Mark. 1996. The conjunct order in Algonquian. *CJL* 41: 201–234. **Chomsky**, Noam. 2008. On phases. In *Foundational issues in linguistic theory. Essays in honor of Jean-Roger Vergnaud*, ed. Robert Freidin, Carlos P. Otero, and Maria-Luisa Zubizarreta, 133–166. MIT Press. **Déchaine**, Rose-Marie, Clare Cook, Jeffrey Muehlbauer, and Ryan Waldie. 2017. (De-)constructing evidentiality. *Lingua* 186–187: 21–54. **Embick**, David. 2010. *Localism versus globalism in morphology and phonology*. MIT Press. **Lochbihler**, Bethany. 2012. *Aspects of argument licensing*. Ph.D. thesis, McGill University. **Lochbihler**, Bethany and **Éric Mathieu**. 2016. Clause-typing and feature inheritance of discourse features. *Syntax* 19: 354–391. **Ostrove**, Jason. 2016. A case of non-linearly conditioned contextual allomorphy in Scottish Gaelic. Ms, UCSC. **Oxford**, Will. 2014. *Microparameters of agreement: a diachronic perspective on Algonquian verb inflection*. Ph.D. thesis, University of Toronto.