Neighbourhood Dispute: Affix Order Reversal in Kiranti

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Main Claim I present an analysis for a fascinating affix-order phenomenon in some Kiranti languages and argue for an OT-account where ALIGN (McCarthy and Prince, 1993; Trommer, 2003) constraints derive a hierarchy-governed affix order that can be overridden by negative constraints on adjacency relations between morphemes (Ryan, 2010).

The Phenomenon It is a well-known phenomenon that agreement markers on a transitive verb can be restricted to a specific order regardless of whether they realize agreement features of the subject or the object (='template morphology', e.g. Stump, 1996). Virtually all Kiranti languages are of this type and interestingly, some of them show a reversal of their expected templatic order in some contexts. One instance of such a mysterious affix reordering can be found in the southeastern Kiranti language Athpare where the general order 'Patient Case (P) > Agent Case (A) > Number (N) > Non-Past (NPst) > Person (Ps) > Past (Pst)' is obscured in some non-past forms: the tense-marker *-t* is in some forms preceded and in others followed by the morphemes *-ci* realizing [–sg] and *-i* realizing the features [+pl,–sg,–3], cf. the data in (1). Such a reordering poses severe problems for a templatic account and can only be derived through additional arbitrary mechanisms (e.g. the suspension of the assumption that rule blocks apply sequentially and the introduction of specific portmanteau rule blocks in Stump, 2001). The important generalization in the Kiranti data is that the contexts for one or the other order can always be attributed to the presence of a certain other morpheme: the order *-t-ci* and *-t-i* can only be found in the presence of the portmanteau marker *-na* marking 1-2 contexts.

Analysis I argue that the order of agreement suffixes in Kiranti follows from a language-specific hierarchy of morpho-syntactic feature classes (4). This is formally implemented in an optimality-theoretic system of ranked ALIGN constraints (McCarthy and Prince, 1993; Trommer, 2003) demanding that (classes of) features must be adjacent to their stem, cf. (2). Departures from this expected order follow from intervening cooccurrence constraints demanding that a certain morpheme (class) must not directly precede another morpheme (class), cf. (3). This straightforwardly implements the fact that the reordering is sensitive to the presence of certain markers, cf. the derivation in (5). This model therefore integrates insights from alignment-based accounts for affix order (Trommer, 2003; Kim, 2010) and from the model in Ryan (2010) where bigram constraints demand adjacency between certain morphemes. Ryan's model is superior to other models of arbitrary ordering like precedence accounts (Paster, 2006) since it is able to derive exactly the kind of context-sensitive reordering discussed here. But his model is highly problematic from a viewpoint of economy: It necessarily involves morpheme-specific ordering constraints for every pair of morphemes that are ever adjacent in a string. Hierarchy-based alternatives on the other side only assume one hierarchy of morpho-syntactic features (Noyer, 1992; Trommer, 2006). In addition, his account must include two complementary bigram constraints for every pair of context-sensitive reordered morphemes in a language: whenever the preferred ordering X-Y is overriden by some other constraint, the dispreferred ordering Y-X surfaces and must be demanded by another lower-ranked constraint.

Discussion and possible Extension One natural extension of the constraints penalizing adjacency between different (classes of) morphemes is the implementation of morpheme OCP-effects, i.e. the ban on two identical adjacent morphemes. The proposed constraint system predicts a situation where this marked configuration is resolved through reordering (vs. the claim in Nevins, 2010) – a situation that is again be found in Kiranti. In Bantawa

(Central Kiranti), whenever two occurrences of the non-singular marker *-ci* are expected to surface, one of them appears before the morpheme *-u* that normally precedes all number markers, cf. (6) This exceptional reordering of the general P > N scheme in Bantawa and related languages follows from a coocurrence constraint OCP(AFFIX) (Pierrehumbert, 1994; Yip, 1998).

(1) *Reordering in Athpare (Ebert, 1997)*

a. *Examples: -ci and -i precede -t*

	1pe	2d
2	**-i-t**-ŋa	
3		Σ-**ci-t**

b. *-ci and -i follow -t*

	2d	2p
1	Σ-na-**t-ci**	Σ-na-**t-i**

(2) *Align Constraints for Morpheme Ordering*

$\Sigma \Lleftarrow X$: Assign a violation mark for every morpheme that intervenes between a marker realizing a morphological category X and the right edge of the stem.

(3) *Morpheme-Coocurrence Constraint for Athpare*

*A-N: Assign a violation mark for every sequence of a morpheme realizing agent case directly followed by a morpheme realizing number features.

(4)

Hierarchy:	P	>	A	>	N	>	Npst	>	Ps	>	Pst
Ranking:	$\Sigma \Lleftarrow$ P	≫	$\Sigma \Lleftarrow$ A	≫	$\Sigma \Lleftarrow$ N	≫	$\Sigma \Lleftarrow$ NPST	≫	$\Sigma \Lleftarrow$ PS	≫	$\Sigma \Lleftarrow$ PST

(5) *Athpare Morpheme Reordering: -ci ↔ -t*

				*A-N	$\Sigma \Lleftarrow$ A	$\Sigma \Lleftarrow$ N	$\Sigma \Lleftarrow$ NPST	$\Sigma \Lleftarrow$ PS
e.g. 3-2d:	-t [NPst]	-ci [Num]						
a.	-t [NPst]	-ci [Num]				*!		
☞ b.	**-ci** [Num]	**-t** [NPst]					*	
e.g. 1-2d:	-ci [Num]	-t [NPst]	-na [A, Ps]					
a.	-ci [Num]	-t [NPst]	-na [A, Ps]		*!*		*	**
b.	-na [A, Ps]	-ci [Num]	-t [NPst]	*!		*	**	
☞ c.	-na [A, Ps]	**-t** [NPst]	**-ci** [Num]			**	*	

(6) *Reordering of -ci in Bantawa (Doornenbal, 2009)*

a. -ci after -u and -m

	3d/p				
1pe	k^hat *Stem*	-u [P,+3]	-m [A,−3,+pl]	-ci [−sg]	-ka [+1,−2]
1pi	k^hat *Stem*	-u [P,+3]	-m [A,−3,+pl]	-ci [−sg]	

b. -ci before and after -u

	3d/p				
1de	k^hat *Stem*	-ci [−sg]	-u [P,+3]	-ci [−sg]	-ka [+1,−2]
1di	k^hat *Stem*	-ci [−sg]	-u [P,+3]	-ci [−sg]	

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