

snippets

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Special Issue on Non-local Contextual Allomorphy

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Editorial Statement

1. Purpose

The aim of *Snippets* is to publish specific remarks that motivate research or that make theoretical points germane to current work. The ideal contribution is brief, self-contained and explicit. One encounters short comments of this kind in earlier literature in linguistics. We feel that there no longer is a forum for them. We want *Snippets* to help fill that gap.

2. Content

We will publish notes that contribute to the study of syntax and semantics in generative grammar. The notes are to be brief, self-contained and explicit. They may do any of the following things:

- point out an empirical phenomenon that challenges accepted generalizations or influential theoretical proposals;
- point out unnoticed minimal pairs that fall outside the scope of any existing theory;
- point out an empirical phenomenon that confirms the predictions of a theory in an area where the theory has not been tested;
- explicitly describe technical inconsistencies in a theory or in a set of frequently adopted assumptions;
- explicitly describe unnoticed assumptions that underlie a theory or assumptions that a theory needs to be supplemented with in order to make desired predictions;
- call attention to little-known or forgotten literature in which issues of immediate relevance are discussed.

We also encourage submissions that connect psycholinguistic data to theoretical issues. A proposal for a pilot experiment in language acquisition or language processing could make for an excellent snippet.

The earliest *Linguistic Inquiry* squibs exemplify the kind of remark we would like to publish. Some of them posed unobserved puzzles. For instance, a squib by Postal and Ross in *Linguistic Inquiry* 1:1 (“A Problem of Adverb Preposing”) noted that whether or not we can construe a sentence-initial temporal adverb with an embedded verb depends on the tense of the matrix verb. A squib by Perlmutter and Ross in *LI* 1:3 (“Relative Clauses with Split Antecedents”), challenging the prevailing analyses of coordination and extraposition, noted that conjoined clauses, neither of which contains a plural noun phrase, can appear next to an “extraposed” relative that can only describe groups. Other squibs drew attention to particular theoretical assumptions. For instance, a squib by Bresnan in *LI* 1:2 (“A Grammatical Fiction”) outlined an alternative account of the derivation of sentences containing *believe* and *force*, and asked whether there were principled reasons for dismissing any of the underlying assumptions (among them that semantic interpretation is sensitive to details of a syntactic derivation). A squib by Zwicky in *LI* 1:2 (“Class Complements in Phonology”) asked to what extent phonological rules refer to complements of classes. None of these squibs was more than a couple of paragraphs; all of them limited themselves to a precise question or observation.

3. Submission details

Snippets is an electronic journal. We will solicit submissions twice a year. The submissions that we accept will be posted on the journal website approximately 3 months after each deadline, and all accepted submissions will remain permanently on the website. *Snippets* is intended as a service to the linguistics community. Consequently, authors are advised that, when they submit to *Snippets*, we understand them as allowing their submission to be reproduced if published. At the same time, the rights for the published snippets themselves will remain with the authors. As a result, citation of *Snippets* material will have to indicate the author's name and the specific source of the material.

We will accept electronic submissions at the address snippetsjournal@gmail.com. Electronic submissions may take the form of (a) the text of an e-mail message, or (b) an attached file. The attached file should be a simple text file, a Word file (Mac or Windows), a Rich Text Format (RTF) file, or a PDF. The files must be anonymous, but must be accompanied with information about the authors: name, affiliation, and (postal or electronic) address. Submissions can be of any length below 500 words (including examples), with an additional half page allowed for diagrams, tables, and references. The submissions may not contain footnotes or general acknowledgments, except acknowledgements of funding sources, which must be credited in a line following the references. Authors who wish to acknowledge language consultants are allowed but not required to do so. We will not consider abstracts.

4. Editorial policy

Submissions will be reviewed by our editorial board and review board, and review will be name-blind both ways. While we guarantee a response within 3 months of the submission deadline, we will not necessarily provide more than a yes/no response to the submitter. We allow resubmission (once) of the same piece.

This statement reproduces with minor modifications the editorial statement in Issue 1 of Snippets (January 2000), edited by Carlo Cecchetto, Caterina Donati and Orin Percus.

Non-local contextual allomorphy: Introduction to the special issue

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In recent years, much work in morphology and its interfaces with syntax and phonology has been devoted to understanding what the locality domains for contextual allomorphy are. After Bobaljik's (2000) formalization of Spell-out proceeding from the inside outwards, Embick's (2010) influential proposal triggered a new wave of work based on the premise that allomorphy can only be conditioned between overt linearly adjacent elements. Developing the minimal conditions on allomorphy further, Bobaljik (2012) argued for structural rather than linear adjacency being the relevant factor (cf. the proposal of Adger et al. 2003 that also crucially relies on structural adjacency). The past few years in particular have seen an explosion of work that tests these claims, seeking to refine the theory of locality in allomorphy while trying to maintain its restrictiveness (a non-comprehensive list includes Marantz 2013, Gribanova 2015, Merchant 2015, Moskal 2015a, b, Grestenberger 2016, Moskal and Smith 2016, Kastner 2016, 2018, Oseki 2016, Svenonius 2016, Toosarvandani 2016, Bobaljik and Harley 2017, Božič 2017, Christopoulos and Petrosino 2017, Gribanova and Harizanov 2017, Kastner and Zu 2017, Ostrove 2018, Smith et al. 2018).

Despite all this recent work, it is still unclear what kinds of allomorphic interactions are possible across languages: can allomorphy be triggered across one intervening head, or more? Should locality be computed linearly or structurally? Do different domains apply to roots and to functional elements? Do different domains constrain syntactic and phonological triggers? These kinds of questions are currently being researched by linguists working on a variety of languages, but the entire field stands to benefit from knowing what the empirical state of affairs is, even if no single theory has been able to capture all of the data yet. To this end, we invited the community to submit short papers in which scholars can draw attention to surprising allomorphic interactions they are currently investigating. We are pleased to have accepted six submissions for inclusion in this special issue.

In her paper discussing Breton plural formation in the context of cardinal numbers, **De Belder** argues that a trigger and target of root allomorphy cannot be located in two different morphological words. She thus finds support for the position that root allomorphy is restricted to operate within the same complex head.

Introducing data from Passamaquoddy-Maliseet, **Bruening** presents a puzzle involving long-distance allomorphy. He sketches two analyses: one that gives up adjacency (be it linear or structural), and one that maintains adjacency but has to assume metathesized morphemes and early fusion.

Drawing on data from Nez Perce, **Deal** also focuses on a puzzle involving long-distance interactions between two heads. She points out that, in principle, such interactions can be seen in two ways: as allomorphy, but also as pre-syntactic bundling. She shows that, irrespective of which

view-point is adopted, the data discussed at hand violate both linear and structural adjacency.

Ganenkov turns to the empirical issue of the hypothesis, introduced by Bobaljik (2012), that ABA patterns do not exist. He discusses data from a number of Nakh-Daghestanian languages, arguing that these languages do show ABA patterns in some of their pronominal paradigms, counter to Bobaljik (2012) and in particular Smith et al. (2018).

Discussing data from Korean, **Lee and Amato** tackle the topic of this issue head-on. They argue for a hybrid type of locality constraint on allomorphy, which takes into account both linear and structural adjacency, with some allomorphy being subject to linear adjacency and other allomorphy being subject to structural adjacency.

Finally, **Wu** discusses data from Kannada, for which she argues that a more careful decomposition is in order than traditionally assumed. On the proposed decomposition, the data also show a pattern of allomorphy, where the trigger and the target are neither linearly nor structurally adjacent, arguing against any type of adjacency restriction in Kannada.

These contributions all challenge existing generalizations in one way or another, and we hope they will be useful for continued work on how the conditions on allomorphy should be relaxed while also maintaining restrictiveness.

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Root allomorphy depends on head movement: Support from Breton pluralization

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The trigger of allomorphy should be sufficiently local to the morpheme subject to the allomorphy (Embick 2010). Bobaljik (2012:68) adopts as a working hypothesis that this locality should be defined as head incorporation: a head that conditions root allomorphy must be in the same complex head (i.e. the same morphological word) as the root. As such, he captures the fact that comparative suppletion is blocked in periphrastic comparatives. This snippet shows that Breton plurality provides further empirical support for the hypothesis that the appropriate locality condition for allomorphy is head incorporation.

Breton plurals may show a vowel modification in the stem, i.e. an ablaut. In other words, the stem may be subject to allomorphy. Note that the actual plural affix (in these cases *-ed*) is often optional for such plurals. Its presence or absence does not yield any semantic effect (see Trépos 1957, Anderson 1986, Stump 1989, Favereau 1997, Harris 2017). (Examples are taken from personal fieldwork and from Favereau 1997:43.)

(1) louarn fox 'fox'	(2) l(u)ern foX _{ALLOMORPH} 'foxes'	(3) l(u)ern-ed foX _{ALLOMORPH} -PL 'foxes'
(4) maout ram 'ram'	(5) meot ram _{ALLOMORPH} 'rams'	(6) meot-ed ram _{ALLOMORPH} -PL 'rams'

Cardinals and plural marking are in complementary distribution in Breton plural NPs. For the nouns under discussion, crucially, the presence of a cardinal does not only imply the absence of a plural affix, but also the absence of the marked root allomorph, which is otherwise selected in plural contexts. In the presence of a cardinal, the default root surfaces obligatorily:

(7) ugent louarn twenty fox 'twenty foxes'	(8) *ugent l(u)ern twenty foX _{ALLOMORPH}	(9) *ugent l(u)ern-ed twenty foX _{ALLOMORPH} -PL
(10) pemp maout five ram 'five rams'	(11) *pemp meot five ram _{ALLOMORPH}	(12) *pemp meot-ed five ram _{ALLOMORPH} -PL

Discussing Turkish and Hungarian data, Borer (2005:116-117) provides the following analysis for the complementary distribution of cardinals and plural marking: in the absence of a cardinal, the

Dividing (Div) feature is realized by the plural affix. When present, however, the cardinal realizes both the feature [Div] (i.e. plural number in this case) and the [#]-feature, i.e. the feature regularly expressed by quantifiers, which represents a counting function semantically. Consequently, in the presence of a cardinal, the noun (i.e. the root, the root incorporated into little n, or simply little n, depending on the analysis) does not head-incorporate into the plural morpheme, either syntactically (via head movement) or post-syntactically (via morphological merger). The data show that in the absence of such head movement, root allomorphy is blocked. As such, these data confirm Bobaljik's (2012:68) hypothesis that root allomorphy depends on head movement.

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Non-local allomorphy in Passamaquoddy-Maliseet

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Passamaquoddy-Maliseet (Algonquian) presents a case of long-distance allomorphy. Verbs in the independent order have a prefix and a sequence of suffixes shown in Tables 1-3. The Prefix and the Central suffix both index one of the arguments, while the Periph(eral) suffix indexes the other. The Theme sign indicates which is subject/object. The Final indicates transitivity and animacy of one of the arguments (here, transitive with animate object). The suffixes relevant here are Neg(ative), “N,” and Dub(itative) and Pret(erite). N appears in several different contexts, including ditransitives and the subordinative mode (it usually has an [n], see (1)). Dub and Pret mark modal and tense categories.

In Table 1, the form of Neg is *-wi*. Neg also takes this form in 1/2 forms that are not preterite (*-ya* is Central, /w/ changing to /y/ after the /i/ of the N suffix):

- (1) (ma=te) k-tok-om-i-w-oni-ya
(Neg=Emph) 2-hit-TransAn-2/1-Neg-N-Pl
'You (Pl) did not hit me.' (subordinative form)

In contrast, in Tables 2 and 3, when the subject and object are both first and second person and the verb is preterite, Neg is null. A special allomorph of either the Dub or Pret suffix appears instead, and Dub and Pret seem to have coalesced.

What this means is that we have non-local conditioning between Neg and Pret (and Dub if present) across intervening suffixes N, Dub, and Central. Neg is only null when the subject and object are both first and second persons and Pret is present (in the dubitative preterite in Table 2, Pret seems to have coalesced with Dub, or even switched places with it, since Dub is usually marked with an *-s*). The features [1,2] are part of the conditioning environment for the special forms of Neg and Pret, so Central might be involved because it reflects these features. However, N does not bear any of the conditioning features (though it also takes a special form in the context of Neg and [1,2]). This means that Neg and Pret take their form based on a head that is separated from them by at least two intervening heads (N and Dub), at least one of which is overt (N).

This non-local conditioning means that the strongest restriction on allomorphy, restricting it to adjacent forms, is too strong. An alternative analysis that would maintain strict locality would be to claim that the suffixes are in a different order in 1/2 preterite forms. The allomorphs of Dub or Pret in Tables 2–3 look like they might include a negative morpheme initially. In some other forms, the Neg suffix before a [p] is *-h*, just like the dubitative preterite 1/2 forms in Table 2. In some other forms, the Neg suffix includes *-hq*, like the beginning of Pret in Table 3. One might analyze these 1/2 preterite forms as having Neg exceptionally follow Central. If one went this route, one could also have Dub and Pret switch positions in Table 2, so that the order in Table 2 is N-Central-Neg-Pret-Dub. In Table 3, the order would be N-Central-Neg-Pret (Dub not present). On this analysis, the two morphemes that are conditioning each other (Neg and Pret) are adjacent,

and Neg would be adjacent to Central, which bears the [1,2] features that also condition the special forms. Even this would not get rid of non-local allomorphy completely: In Table 3, Neg would be *-hq-* and Pret *-(o)pon*; in Table 2, the final /n/ of Pret *-(o)pon* would assimilate to the /s/ of Dub, but Neg would have to take the form *-h-* rather than *-hq-* based on the presence of Dub, which is not adjacent to it. The only way to avoid non-local conditioning in Table 2 is to analyze *-poss* as a single form that encodes both Pret and Dub.

Table 1: Direct forms, plural (3rd person) object

Subject	Prefix	V Stem	Final	Theme	Neg	N	Central	Dub	Pret	Periph
1	n-	tok	-om	-a	-wi			-s	-opon	-ik
2	k-	tok	-om	-a	-wi			-s	-opon	-ik
3	'-	tok	-om	-a	-wi			-s	-opon	-i(hi)
1P	n-	tok	-om	-a	-wi		-nu	-s	-opon	-ik
12	k-	tok	-om	-a	-wi		-nu	-s	-opon	-ik
2P	k-	tok	-om	-a	-wi		-wa	-s	-opon	-ik
3P	'-	tok	-om	-a	-wi		-wa	-s	-opon	-i(hi)

Table 2: 1-2 forms, dubitative preterite

Subj/Obj	Prefix	V Stem	Final	Theme	Neg	N	Central	Dub	Pret	Periph
1/2	k-	tok	-om	-olu				-hposs		
1/2P	k-	tok	-om	-ol		-p	-a	-hposs		
1P/2(P)	k-	tok	-om	-ol		-po	-nu	-hposs		
2/1	k-	tok	-om	-i				-hposs		
2P/1	k-	tok	-om	-i		-p	-a	-hposs		
2(P)/1P	k-	tok	-om	-i		-po	-nu	-hposs		

Table 3: 1-2 forms, preterite (non-dubitative)

Subj/Obj	Prefix	V Stem	Final	Theme	Neg	N	Central	Dub	Pret	Periph
1/2	k-	tok	-om	-olu					-hqopon	
1/2P	k-	tok	-om	-ol		-p	-a		-hqopon	
1P/2(P)	k-	tok	-om	-ol		-po	-nu		-hqopon	
2/1	k-	tok	-om	-i					-hqopon	
2P/1	k-	tok	-om	-i		-p	-a		-hqopon	
2(P)/1P	k-	tok	-om	-i		-po	-nu		-hqopon	

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Locality in allomorphy and presyntactic bundling: A case of tense and aspect

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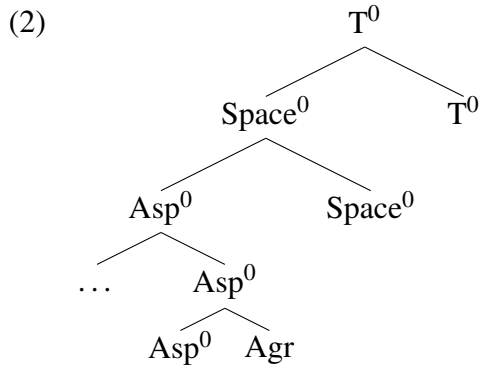
Connections between the realization of tense information and viewpoint aspect information may arise in two ways. One is allomorphy: T and Asp are projected separately and the realization of one depends on the other. Another is presyntactic bundling: meaning associated with tense and with aspect is packaged together into a single syntactic atom (e.g. Lin 2006). Current theorizing about allomorphy posits locality conditions in terms of linear (Embick 2010) or structural (Bobaljik 2012) adjacency. While conditions on bundling have received less attention, a locality condition is plausible here too: only information associated with heads that would be structurally adjacent in a functional sequence may be bundled into a single morpheme (e.g. Voice and v_{caus} , Pylkkänen 2002; T and Agr, Bobaljik and Thráinsson 1998).

Evidence from Nez Perce suggests that the two locality conditions cannot be jointly maintained. In this language, Asp and T may be separated by (number) agreement and by a ‘space marker’ (translocative or cislocative). This is shown for the imperfective aspect in (1).

(1) Suffix order: Aspect - Agr - Space - Tense

- a. hi- wehye -[c] -i -nki -[ke]
3SUBJ- go -IMPERF -S.PL -TRANSLOC -REM.PAST
‘They were going away.’ (Aoki and Walker 1989:292)
- b. ’inahna -[c] -a -m -[qa]
carry -IMPERF -S.SG -CISLOC -REC.PAST
‘You were bringing (something).’ (Aoki and Walker 1989:586)
- c. hi- kuu -te -[c] -e -m -[∅]
3SUBJ- water -go.away -IMPERF -S.SG -CISLOC -PRES
‘She is coming for water.’ (Aoki and Walker 1989:263)

While agreement could be analyzed as a dissociated morpheme on Asp, Space⁰ behaves like a head in the functional sequence between Asp and T. Space markers select for particular aspects, appear in only one location in the clause, and, like tense, are closed-class, inflectional morphemes with a basic meaning of locating events deictically in spacetime (Deal 2009). Asp and T are clearly not linearly adjacent in (1); these considerations suggest that they are not structurally adjacent either. Rather, in the head-adjunction structure for the inflected verb, T combines with a projection of Space, and Space combines with a projection of Asp:



This structure frames a puzzle that arises in the habitual aspect, where the form of the aspect marker is affected by tense information (as well as agreement). Like in the imperfective, habitual aspect is followed by agreement, then space, then tense. The combined forms of habitual Asp and Agr are given in (5); space marking does not affect these forms.

(3) hi- weqi -tee -tu -m -∅
 3SUBJ- rain -HAB -S.SG -CISLOC -PRES
 ‘It rains here.’

(4) hi- waqi -qa -m -qa
 3SUBJ- rain -HAB.SG -CISLOC -REC.PAST
 ‘It used to rain here (recently).’ (Deal 2010)

(5) Forms of habitual aspect + agr

	SG	PL
PRES	tee-tu	tee-’nix
PAST	qa-∅	e-’niix

Observe that *tee* appears only in present tense and *qa/e* only in past tense (both recent and remote). Why? We return to our two types of analyses from above. If Asp⁰ contains only aspectual information (relating Event Time to Topic Time, Klein 1994), this is allomorphy; however, the conditioning environment (i.e. T) is neither linearly nor structurally local. If Asp⁰ contains both aspectual and tense information (relating Event Time (to Topic Time) to Utterance Time; cf. Cable 2013), this is presyntactic bundling; deictic tense meaning is carried both by Asp⁰ and T⁰. The same challenge now arises for locality conditions imposed on this phenomenon. Findings about the locality conditions on allomorphy thus have the potential to directly impact claims about restrictions on syntactic atoms in natural language.

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The ABA pattern in Nakh-Daghestanian pronominal inflection

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A recent line of research in Distributed Morphology seeks to restrict contextual allomorphy, including suppletion, by appealing to the notion of *structural containment*. Based on his extensive survey of adjectival degrees of comparison, Bobaljik (2012) observes that the ABA pattern, where the comparative form is suppletive but the superlative form uses the same stem as the positive form, seems to be absent altogether. Bobaljik accounts for this gap in structural terms by suggesting that the structural representation of the superlative contains that of the comparative, as in (1).

(1) [[[positive] comparative] superlative]

Building on previous work on structural containment in case morphology (Caha 2009), Smith et al. (to appear) consider triples of *unmarked case*, *dependent case*, and *lexical case* in a sample of languages and show that the ABA pattern is unattested in case-driven suppletion of pronouns, concluding that this gap can also be accounted for by structural containment, as in (2).

(2) [[[unmarked case] dependent case] lexical case]

Exploring patterns of pronominal allomorphy, Smith et al. make extensive use of data from Nakh-Daghestanian and find no instance of the ABA pattern there (see also McFadden 2018). This snippet documents potential counterexamples to this claim attested in Nakh-Daghestanian, shown in Table 1 (OBL refers to the stem used in lexical cases; the ergative suffix within the ergative form is separated from the stem by a hyphen).

		ABS	ERG	OBL	ReAdj	No ReAdj	Source
Ingush	1SG	so	aa-z	suo-/so-	ABA	ABA	Nichols 2011
	1EXCL	txo	oax-a	txuo-/txo-	AAA	ABA	
	2SG	hwo	w-a	hwuo-/hwo-	AAA	ABA	
	2PL	sho/shu	oash-a	shuo-/sho-	AAA	ABA	
Botlikh	1SG	den	iškur	di-	ABA	ABC	Saidova and Abusov 2012
Lezgian	2SG	wun	wun-a	wa-	AAA	AAB	Haspelmath 1993
			n-a		ABA?	ABC?	

Table 1: The ABA pattern in Nakh-Daghestanian pronominal inflection.

Which pattern a particular paradigm represents depends very much on whether all irregular allomorphy counts as suppletion or only strong suppletion counts, whereas weak suppletion and other irregularities are dealt with by Readjustment Rules. Table 1 identifies the examples in terms of

Smith et al.'s approach, which handles minor irregularities in terms of Readjustment, and a more permissive approach that takes any non-phonologically conditioned variation in roots to represent suppletion (Haugen and Siddiqi 2013, Haugen 2017).

The most robust ABA pattern is observed in the Ingush 1SG pronoun, which has the stem *so-/suo-* in all cases except the ergative, where the stem *aa-* is used. According to Nichols (2011: 173), the ergative form was originally formed by metathesis (this pattern is still preserved in the closely related Chechen). The situation is thus similar to the 2PL pronoun in Archi, as analyzed by Smith et al. Unlike in Archi, however, the metathetic formation of the ergative has been obscured in Ingush by irregular consonant changes and the reanalysis of the stem-final consonant in the ergative form as the ergative suffix. The stem of the 1SG pronoun used in the ergative thus is synchronically completely irregular and bears no relation to the absolutive or oblique stem.

Whether there are additional examples of the ABA pattern in Ingush will differ depending on whether or not we allow Readjustment. If we do not allow Readjustment Rules, the ergative forms of the 1PL.EXCL, 2SG, and 2PL pronouns also represent instances of the ABA pattern.

If Readjustment is allowed, the 1SG pronoun in Botlikh provides another clear example of ABA, having the ergative stem completely unrelated to either the absolutive or the oblique stem, due to the loss of the original pronominal stem and replacement. By the logic of case containment, this irregular change should have affected the stem used with lexical cases, contrary to fact.

Another potential example of ABA is the 2SG pronoun in Lezgian, which has two variants of the ergative. Historically, the variant *na-* is the regular output of a phonological rule applied to *wuna*, where [n] in *na* corresponds to the stem-final consonant in the absolutive and original ergative form. Under the Case Containment Hypothesis, the existence of the *na-* variant of the ergative implies the existence of parallel variants in lexical cases, again, contrary to fact.

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A hybrid locality constraint on allomorphy: Evidence from Korean

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Korean exhibits a case of suppletion of the verbal root \sqrt{give} . The allomorph /tal/ is subject to two conjoint contexts: (i) the dative argument bears the feature [+author] and (ii) the illocutionary force is imperative. The elsewhere form for \sqrt{give} /cwu/ is an intra-individual variant. Note that /tal/ is blocked when the verb is negated, as shown in (1a). The negator /mal/, whose form is different from /an(i)/ and /mos/ (Chung 2009), is involved in the jussive construction, meaning ‘must not’ or ‘not allowed to’.

- (1) a. (Ne) na-eykey satang-ul **cwu/tal**-Ø-la.
 you.NOM I-DAT candy-ACC give/give-PRS-IMP
 ‘Give me a candy.’
- b. (Ne) na-eykey satang-ul **cwu/*tal**-ci-ma-la.
 you.NOM I-DAT candy-ACC give/give-CI-NEG-IMP
 ‘Do not give me a candy.’

It is intriguing that /tal/ is conditioned by two separate environments: (i) within a phrase [_{VP} DP_{dat} .. \sqrt{give}] and (ii) beyond a phrase [[[[... \sqrt{give}] v] T] C_[IMP]].

These data raise a question about which grammatical restrictions should hold for contextual allomorphy. As far as the context (i) is concerned, /tal/ poses a problem to structural locality, since it is triggered by the dative argument. This argues against the locality constraint proposed by Bobaljik and Harley (2017), which says that suppletion may only be triggered under sisterhood. As the indirect object is in a specifier position, it should not condition the allomorphy of the head X⁰. Instead, Bobaljik’s (2012) original proposal can account for recipient-driven suppletion (see Weisser 2018 for Malayalam), since the local domain is defined as a maximal projection XP.

The context (ii) for /tal/, however, cannot be subject to the structural locality constraint, as the trigger C_[IMP] lies outside of the maximal projection. These data are also not compatible with Moskal and Smith’s (2016) Hyper-contextual rule, which allows the root to be accessible to the T head at most in the structure [[[[... \sqrt{give}] v] T] C_[IMP]. This hints at linear adjacency as a further constraint for suppletion. Merchant (2015)’s Span seems to be a viable option, as it extends the local domain to a contiguous set of heads. Still, it cannot explain the free-variation between two allomorphs (i.e. /tal/ ~ /cwu/ - (1a)). In addition, note that linear adjacency cannot be the sole condition, due to context (i): the direct object intervenes between DP_{dat} and \sqrt{give} .

Hence, our data suggest the need for a hybrid theory of locality (as in Embick’s 2010 Node Adjacency Hypothesis), since both structural and linear locality constraints are required. The maximal projection should be considered as the local domain, so that the root may be conditioned

by the dative argument. Simultaneously, functional heads in the verbal extended projection can trigger root allomorphy if they are linearly adjacent. However, in the string of heads (i.e. $\sqrt{\text{give}} \frown v \frown T \frown C$), the root and C head are not linearly adjacent. Since the intervening v and T heads have phonologically null exponents, they can be cyclically eliminated by the morphological operation PRUNING (Embick 2008), which gives rise to linear adjacency: $\sqrt{\text{give}} \frown v \frown T \frown C \rightarrow \sqrt{\text{give}} \frown C$. Overt items such as negation in (1b) cannot be pruned and destroy the adjacency relation between the root and C head.

Yet, optionality in the competition between the elsewhere and the specific allomorph in (1a) cannot be predicted. Free variation poses a challenge to current frameworks that rely on the Subset Principle, which derives a single output from an input (Halle 2000). This paradoxical problem could be solved by assuming that PRUNING operates optionally. Through the optional application of PRUNING, we can derive free variation by relativizing the local domains for both the suppletive and elsewhere allomorphs. This failure of competition within a grammar may hint at quantitative aspects of rule application akin to those in Nevins and Parrott 2010 and Bobaljik 2012.

These data contribute to the discussion about locality constraints on contextual allomorphy, and broaden our understanding of morphological operations.

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Non-local allomorphy in Kannada

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Within the framework of Distributed Morphology (Halle and Marantz 1993), the exact mechanisms of contextual allomorphy depend on what locality restrictions are imposed during Vocabulary Insertion (Bobaljik 2012, Embick 2003). The marking of tense in Kannada indicative verb forms suggests that allomorphy can be linearly and structurally non-local.

Kannada indicatives are inflected for tense, person, gender, and number. In affirmative forms (1), a tense suffix attaches to the root, followed by agreement. In negative forms (2), agreement surfaces directly after the root, without a tense suffix or overt negative marker. The table (3) is a partial agreement paradigm for Kannada (Hodson 1859, Melinamath 2014).

(1) nōḍ-utt-ēne
see-PRES-1.SG
'I see.'

(2) nōḍ-∅-enu
see-NEG-1.SG
'I do/did/will not see.'

(3) Partial indicative verb agreement paradigm

		PRES (-utt-)	PAST (-id-)	FUT (-uv-)	NEG
1	SG	-ēne	-enu	-enu	-enu
	PL	-ēve	-evu	-evu	-evu
M	SG	-āne	-anu	-anu	-anu
	PL	-āre	-aru	-aru	-aru
3	SG	-āḷe	-aḷu	-aḷu	-aḷu
	PL	-āre	-aru	-aru	-aru
N	SG	-ade	-adu	-adu	-adu
	PL	-ave	-avu	-avu	-avu

I propose the parse in (4). In negative forms, Neg is projected and an impoverishment rule (5) deletes all tense features on T; then, by the Subset Principle (Halle and Marantz 1993), none of the vocabulary items for tense (6) can apply to T. Impoverishment here allows us to capture the systematic lack of tense marking in negative forms.

(4) $\sqrt{\text{ROOT-}v\text{-(Neg)-T-Agr}_1\text{-Agr}_2\text{-FV}}$

(5) $T \rightarrow \emptyset / \text{Neg } _$

(6) [PRES] \leftrightarrow -utt-
[PAST] \leftrightarrow -id-
[FUT] \leftrightarrow -uv-

The issue of locality becomes apparent in agreement marking. Traditionally, the forms in (3) have been treated as a whole as agreement. I argue that “agreement” in Kannada actually reflects three morphemes: Agr₁, a vowel that marks person (7); Agr₂, a consonant that marks gender and number (8); and a final vowel (FV) that is conditioned by tense. As the person and gender/number markers function rather independently, they should not be considered a single Agr morpheme. Furthermore, FV patterns with tense features and should not be considered part of the Agr morphemes.

(7) [1] ↔ -e-
elsewhere ↔ -a-

(8) [-PL] ↔ -n-
[+F -PL] ↔ -ɪ-
[+N -PL] ↔ -d-
[+PL] ↔ -v-
[-N +PL] ↔ -r-

What challenges the theory of adjacency is that FV is conditioned by information on T. As shown in (9), the more specified vocabulary item *-e* is inserted in context of T_[PRES], while the elsewhere case *-u* is inserted for past, future, and negative forms. This corroborates the impoverishment rule in (5), as all negative forms have the elsewhere case *-u*.

(9) [FV] ↔ -e / [PRES] ... __
[FV] ↔ -u

However, FV is linearly and structurally separated from T by the Agr morphemes. Positing tense features on FV could resolve the adjacency issue, but this would wrongly predict *-e* and not *-u* in present negative forms. There would need to be two impoverishment rules, one for T and one for FV, but this misses the generalization that negative forms are tenseless. Thus it appears that FV is sensitive to features on T, exhibiting both linearly and structurally non-local contextual allomorphy.

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