Exploring linear contiguity: the overlapping decomposition

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The goal of this paper is to explore a new approach to *ABA generalizations. My starting point is the observation by Blansitt (1988: 177-8), who notes that "the functions [...]

(1) DATIVE – ALLATIVE – LOCATIVE

can be identically marked only if the identically marked functions are contiguous in the order shown." The generalization in (1) is based on the sample of 71 diverse languages and will be referred to as Blansitt's generalization.

In order to illustrate the basic insight, let me turn to data from a couple of languages, starting from Japanese. In this language, the marker *-ni* can be used to mark all the three categories. In Pite Saami (Wilbur 2014), the dative and allative pattern together to the exclusion of the locative. Finally in Chol (Mayan), the allative and the locative are marked the same to the exclusion of the dative (Vázquez Álvarez 2011: 281-2). Most importantly, no language in Blansitt's sample shows the fourth logical possibility for syncretism, i.e., the syncretism of locative and dative to the exclusion of the allative, which is the reason for stating the generalization (1).

(2) The syncretism patterns summed up

	DATIVE	ALLATIVE	LOCATIVE
Japanese	■	■	■
Pite Saami	■	■	
Chol		■	■
NOT ATTESTED	A	B	A

In several recent studies on *ABA, such patterns are encoded by means of feature cumulation (see Caha 2009; Starke 2009; Pantcheva 2011; Bobaljik 2012; De Clercq 2013; Hardarson 2016). The idea is that categories that enter into such a contiguity sequence decompose into features, and the number of such features monotonically grows as we go from one side of the generalization to the other. Applying this standard approach mechanically to (1), we arrive at two possible decompositions, as depicted in (3).

(3) Feature cummulation as a way of deriving *ABA

	FEATURES OPTION 1	FEATURES OPTION 2
DAT	A	ABC
ALL	AB	AB
LOC	ABC	A

Under either of these scenarios, there is no way of setting up lexical entries in a way that a *ABA pattern arises. With the theory in place, it would seem that the only thing left to account for (1) is to decide which of these two options is correct. The standard decision procedure would be to inspect containment relations among these categories; but it turns out that in the case of Blansitt's generalization, we are headed for a surprise. Specifically, there are languages where the allative (which is in the middle of the sequence) is composed of the locative and the dative (Malayalam, Waris, Iatmul, Tsez and Macedonian belong in this class). For instance, in Tigrinya, the dative is *ne*, the locative is *ab*, and the allative is composed of *ne+ab*. Such facts are obviously incompatible with the cumulative approach to contiguity; the middle form cannot be composed of the morphemes that express the top and bottom cell in (3).

The lesson to learn is that in order to capture the facts reported by Blansitt, we need to move beyond cumulation, and acknowledge that there must be more than one way to derive a *ABA pattern in the grammar. The particular solution I propose is shown in (4), drawing inspiration from (Bobaljik & Sauerland 2017). The basic idea is that each of the Tigrinya suffixes more or less faithfully reflects one underlying feature (or a set of features), which can be called A and B. The locative has the feature A, dative has B, and allative has them both. I will be calling this an overlapping decomposition.

(4)

	DATIVE [B]	ALLATIVE [A,B]	LOCATIVE [A]
ab = [A]		*ab*	*ab*
ne = [B]	*ne*	*ne*	
FORM	*ne*	*ne+ab*	*ab*

The overlapping decomposition captures the containment facts in a straightforward manner: the allative is underlyingly composed of the features of both the dative and the locative. However, it is less clear how the *ABA pattern follows. My main point in the paper is to show that if the overlapping decomposition is correct, it is impossible to derive the patterns of the table (2) using DM's Subset Principle, but it can be accounted for using the Superset Principle of Nanosyntax.

First consider why the Subset Principle fails. In order to derive the Japanese facts, we need an underspecified entry that can apply in all the cases. This "default" entry is radically underspecified, and shown in (5-a).

(5) a. Japanese DAT-ALL-LOC ⇔ $[_K$ Ø]
b. Chol ALL-LOC ⇔ $[_K$ A]
c. Pite Saami DAT-ALL ⇔ $[_K$ B]
d. X ⇔ $[_K$ A,B]

If we combine such an entry with a competitor that spells out either A or B, we get Chol and Pite Saami respectively. These entries are in (5-b,c). For instance, the competitor specified for A takes precedence over the default entry in all cases that have A, i.e., in LOC and ALL, and these two cases end up syncretic. The underspecified marker appears in DAT only.

The problem is that this system allows the generation of a *ABA pattern. If – in addition to the default entry – we postulate a marker X specified for [A,B] (see (5-d)), this marker wins over the default in ALL only, and the default surfaces in DAT and LOC, contrary to what we set out to derive. In other words, when applied to the overlapping decomposition, the Subset Principle cannot derive the attested patterns and at the same time rule out an ABA pattern.

The Superset Principle used in Nanosyntax (Starke 2009) encounters no problems. The default entry is construed as "overspecified," see (6-a); it applies in all the cells because it contains their specifications. In Chol, it is 'beaten' by the entry (6-b), which appears in DAT only. Finally, in Pite Saami, the competitor to the default entry looks as shown (6-c). The main point is that there is no way of setting up a competitor to the entry (6-a) that would beat it in ALL and no other case. In order to appear in the allative, the competitor would have to have the features A and B. But then it would be identical to the default entry, and not represent the relevant competitor that wins in ALL and no other case but ALL.

(6) a. Japan DAT-ALL-LOC ⇔ $[_K$A,B]
b. Chol DAT ⇔ $[_K$ B]
c. Pite Saami LOC ⇔ $[_K$ A]
d. X ⇔ $[_K$??]

All in all, I argue that there must be more ways to account for a *ABA generalization than just feature cumulation, because feature cumulation cannot capture the containment pattern that sets (1) aside from the classical cases of *ABA. I then offer a new type of decomposition: the so-called overlapping decomposition. Together with the Superset Principle, the new type of decomposition can be used as a base for deriving both the containment and the syncretism.