Adapting to your environment - Introducing chameleon affixes

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A chameleon affix (Kiparsky, personal communication), also known as dual-level affix (Aronoff 1976, Kiparsky 2005), is an affix that induces phonological surface nonuniformity dependent on its morphological environment. POSS affixes in Sekani (Athabaskan, data source: Hargus 1985) are chameleon affixes. If they are adjacent to a root, they bleed a general process of vowel nasalisation, compare the example of the root in isolation (1a) to the example where the POSS is added (1b).

(1) a.
$$ts\tilde{\underline{o}}$$
 b. $sats\underline{on-\underline{o}}$ 1sg-shit-poss 'my shit'

If the POSS affixes occur with a NMLZ affix, an affix which counterbleeds nasalisation, see (2a), the POSS no longer bleeds nasalisation, see (2b). Notice that in example (2b) the vocalic NMLZ affix is deleted on the surface to avoid two adjacent suffix vowels.

sats'əd1?õi (2) a. sa- ts'ədə-₫-?on -i ?- UNSP.SBJ- DER- ASP- compact.object.be.in.position -NMLZ 'pendant' b. sats'ədl?õè sa- ts'ədə- ?on è -i ?- UNSP.SBJ- DER- ASP- compact.object.be.in.position -NMLZ -POSS 'my pendant'

This data can be explained in a stratal framework by assuming that the NMLZ affix is a word-level affix, it comes too late to bleed nasalisation, thus leading to a counterbleeding effect, as in (2a). The POSS must be a stem-level affix when it appears with the root to bleed nasalisation, as in (1b) and simultaneously a word-level affix when it follows the NMLZ, as in (2b). Thus, it is a chameleon affix which adapts to its stratal environment.

In this study, I present an introduction to the concept of chameleon affixes in a Stratal OT framework (Kiparsky 2000, Bermúdez-Otero 2018). I show that the behaviour of chameleon affixes can be classified into five distinct patterns shown in the table below. Four of these patterns are attested in a small sample of 10 languages. The cross-classification is defined by the behaviour of three elements: X = stem-level affix/root; Z = trigger affix; Y = chameleon affix. In the Sekani

examples X constitutes the root, Z the NMLZ affix and Y the POSS affix. Sekani exhibits pattern (A). In combination with the root, the POSS forms a single domain where bleeding of nasalisation occurs. Once the NMLZ surfaces with the POSS, it breaks up said domain causing the effect of counterbleeding nasalisation. Triggers such as the NMLZ are classified as 'break-up triggers' in patterns (A), (B) and (C). There also exist 'make-up triggers' which force a chameleon affix which would usually form a seperate domain to the stem-level, to be inside of the stem-level, as in pattern (D) and (E). The patterns are further classified by the order of the chameleon affix and the trigger affix. Patterns (A), (B) and non-attested (D) display a more peripheral chameleon affix, whereas patterns (C) and (E) display a more peripheral trigger affix.

	$trigger \prec chameleon$		chameleon \prec trigger
	(A) √	® ✓	© ✓
	[X ₁ Y ₂]	[X ₁ Y ₂]	$[X_1 Y_{\bowtie}]$
break-up trigger			
	$[[X_1]X_2Y_{\bowtie}]]$	$\left[\left[\left[X_1 \ X_1 \ \right] \ Y_{\bowtie} \right] \right]$	$[\;[\;\mathrm{X}_1\;]\;\mathrm{Y}_{\scriptscriptstyle{\mathclap{ullet}}}\;\mathrm{Z}_2\;]\;]$
	Mandan, Sekani, Tigrinya	Murrinhpatha, Sinhala	Nez Perce
	\mathbb{D} X		E ✓
	$[\;[\;\mathrm{X}_1\;]\;\mathrm{Y}_{\scriptscriptstyle{\widehat{\wp}}}_{\scriptscriptstyle{\widehat{\wp}}}\;]\;]$		$[[X_1]Y_{\varnothing}]]$
make-up trigger			
	$[\begin{array}{ccc} \mathrm{X}_1 \ \mathrm{Z}_1 \ \mathrm{Y}_{\scriptscriptstyle{\widehat{\wp}}} \end{array}]$		$[X_1 Y_{\bowtie} Z_1]$
	N/A		Kaqchikel, Macedonian, Sekani, Gã, Seri

Sekani with its patterns (A) chameleon, is straightforwardly derived in a stratal architecture of morphophonology. I assume that chameleon affixes are stratum underspecified (following Popp 2023). By default, the stratum underspecification leads to affixation at the stem level, except when affixation is impossible due to morphological incompatability. In this case, affixation of the chameleon is postponed until the incompatability is resolved. In pattern (A), the incompatability is resolved by affixation of a word-level affix, which then provides the context for the chameleon to affix at word level.

Patterns (C) and (E) that are also attested in the language sample pose a problem to the stratal analysis. In these patterns the chameleon affix must look-ahead and anticipate the affix that follows it which provides a challenge to a cyclic derivation of the morphology in Stratal OT.

References

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