

Why doesn't phonology respect my (morphological) boundaries?

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Main Claim: The phonological grammar is stratified, but strictly modular; all affixes and clitics are present in the input to the first stratum. Affix and clitic correspond to morphological features; there is no distinction between “affix” and “clitic” in the phonology.

Background: Stratal OT assumes phonological domains that correspond to morphosyntactic structure (Kiparsky 2015): stem, word, and phrase. Clitics are of empirical significance because they are “neither clearly independent words nor clearly affixes” (Zwicky 1977:1). While Anderson (2005) treats them as exclusively post-lexical (i.e., phrase level), Bermúdez-Otero (2006) argues that clitics must be able to specify for the word-level domain. An example of this is subject clitics in St'át'imcets (Lillooet; Salish), which pattern with affixes by attracting stress if other vowels are [ə] (1a), while other clitics do not (1b). An analysis of St'át'imcets cannot treat all clitics as post-lexical. **BOUNDARY MISMATCHES** are the first type of divergence between morphosyntax and phonology considered in this paper.

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|-----|----|-----------------------------------|----|----------------------------------|
| (1) | a. | ləŋ ^w -ən= lkán | b. | ləŋ ^w -ən= mał |
| | | hide-TR= 1SG.SBJ | | hide-TR= ADHORT |
| | | ‘I hid it.’ (Van Eijk 1997:17) | | ‘Hide it.’ (Van Eijk 1997:17) |

The second type of divergence is **LINEAR MISMATCHES**. In ʔayʔajuθəm (Comox-Sliammon; Salish), the 3ERG affix *-as* is not realized when it is directly followed by one of two clitics (RPT or FUT); however, the past tense is “transparent” (and can separate the two morphemes on the surface), as shown in (2a). An additional **LINEAR MISMATCH** involving the past tense relative to clitics is shown in (2b): The past tense *-uł* is an affix and therefore should be closer to the root than the subjunctive clitic *=an*, but the surface order shows the opposite pattern.

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|-----|----|--|-------------------------|----|---------------------------------------|--|
| (2) | a. | yəm-əx ^w -Ø- uł=k^wa | k ^w =χajəys. | b. | x ^w aʔ=č | k ^w ən-i-θut= an-uł |
| | | kick-NTR- 3ERG-PST=RPT | DET=rock | | NEG=1SG.SBJ | see-STAT-CTR.REFL= 1SG.SBJV-PST |
| | | ‘He kicked the rock (I heard).’ (Huijsmans 2023:101) | | | ‘I wasn’t careful.’ (Kroeber 2002:27) | |

Mismatches between expected (based on morphosyntax) and surface linear order have resulted in a number of different proposals, such as Arregi and Nevins (2022). In this paper, we present an analysis couched in Stratal OT that accounts for **BOUNDARY MISMATCHES** and **LINEAR ORDER MISMATCHES** with a strictly modular view of morphology and phonology.

Theoretical Model: We assume a two-step approach to lexical insertion (see, e.g., Davis & Huijsmans 2024). Morphological features (including linearisation features like [suffix] and [enclitic]) are inserted at the first step, prior to linearisation. Phonological content is then inserted for each morpheme in the linearised string at step two. Aside from roots (which are unmarked), each lexical entry bears a diacritic specifying it for a stratum (Mellesmoen 2025), which crucially does not need to match its morphological specification (as an affix or clitic). A linearised string of phonological content is the input to the phonological grammar, which we assume is constraint-based and stratified (i.e., Stratal OT). Affixes and clitics are parsed into words at different strata, as specified by their diacritic; all phonological content is present in the input to the first stratum. The ranking **MORPHEME_{L2}** (do not parse phonological content with an L2 diacritic) >> **PARSE_M** (parse all phonological content) at Stratum 1 allows (most) clitics to be left unparsed (and outside the domain for word-level stress), while the reverse ranking at Stratum 2 ensures they will undergo phrase-level phonological processes.

Analysis of Mismatches in Salish: Following the second step of lexical insertion, there is no indication of the suffixal or enclitic status of a morpheme; there is only a series of phonological strings that carry lexical diacritics. The difference in stress patterns between (1a) and (1b) is analysed in (3a) and (3b): the subject clitic bears an L1 diacritic and patterns with the affixes, while the adhortative clitic bears a L2 diacritic. Linear order is respected, but boundaries in the phonology are otherwise independent of morphology.

(3)	Pre-Step II:	a.	hide-TR=1 SG.SBJ	b.	hide-TR=ADHORT
	Post-Step II:		(lɬ ^w) (n) _{L1} (ɬkan) _{L1}		(lɬ ^w) (n) _{L1} (maɬ) _{L2}
	Stratum 1 (L1):		(ləɬ ^w ənɬkán) _w		(ləɬ ^w ən) _w (maɬ) _{L2}
	Stratum 2 (L2):		(ləɬ ^w ənɬkán)		(ləɬ ^w ənmaɬ)

We account for the LINEAR ORDER MISMATCH in (2) by proposing the analysis in (4). PST has no linearisation feature and therefore is linearised like a post-predicative auxiliary in the morphology; it undergoes lexical insertion last in the string. The subjunctive clitic carries a L1 diacritic and will be parsed into the prosodic word with the affixes. This analysis accounts for an affix occurring outside of a clitic, as shown in (4b). As the phonological form of PST carries the L1 diacritic, it must be moved inward to the closest permitted position at the point of insertion (i.e., between a L1 and L2 string), as shown in (4a). We assume that movement is restricted to edges: the past cannot crossover any phonological content with the L1 diacritic.

(4)	Pre-Step II:	a.	kick-NTR-3ERG=RPT PST	b.	see-STAT-CTR+REFL=1 SG.SBJV PST
	Mid-Step II:		(ym) (x ^w) _{L1} Ø (k ^w a) _{L2} PST		(k ^w n) (i) _{L1} (θut) _{L1} (an) _{L1} PST
	Adjust+Insert:		(ym) (x ^w) _{L1} Ø (uɬ) _{L1} (k ^w a) _{L2} _		(k ^w n) (i) _{L1} (θut) _{L1} (an) _{L1} (uɬ) _{L1}
	Stratum 1/L1:		(yéməx ^w uɬ) _w (k ^w a) _{L2}		(k ^w əniθutanuɬ) _w
	Stratum 2/L2:		(yéməx ^w uɬk ^w a)		(k ^w əniθutanuɬ)

Implications: Phonological domains and surface linear order can diverge from morphosyntactic structure. This supports a highly modular approach to the grammar: syntactic information is lost at the point of linearisation, while morphological information is lost at the point when phonological content is inserted. However, despite the fact that phonology does not need to match the morphosyntax, there is a cross-linguistic tendency for all clitics to occur outside of affixes, as well as for linear order to typically follow from the syntactic structure. We assume the default linear order of phonological content matches the order specified by morphological features. We therefore expect BOUNDARY MISMATCHES to be the most common cross-linguistic pattern, where the linear order remains unchanged; these mismatches arise when the division between “word” and “phrase” phonology does distinguish *all* affixes from *all* clitics. LINEAR ORDER MISMATCHES are rarer and represent exceptional cases where conflicting phonological evidence motivates a repair of the default (i.e., morphology-compliant) order.

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