

The properties of segments at word edges are frequently not consistent with generalizations that obtain in word-internal syllabic domains, and theoretical responses have varied as to whether such asymmetric edge effects represent greater complexity within an exhaustive syllabic parse, or whether they are more appropriately treated as independent *extra-syllabic* properties (Harris 1983, Bagemihl 1991, Hayes 1995, Torkency & Siptar 1999, Broselow 2003, among others). The present paper aims to contribute to a theory of prosodic parsing through the analysis of data that motivates non-exhaustive parsing not simply of a single segment, as has generally been the empirical focus in the literature, but of multiple segments at the left word edge.

The data are drawn from a Central Salish language, *hənqəmínəm*. In contrast to Nuxalk (a.k.a. Bella Coola), which is the northernmost and most divergent Salish language (Thompson & Kinkade 1990) and whose striking tolerance of lengthy obstruent-only words as in (1) is renowned (Newman 1947, Hoard 1978, Nader 1984, Bagemihl 1991, etc.), *hənqəmínəm* is subject to more familiar ProperHeadedness constraints that epenthesize a default schwa nucleus to syllabify all lexical category words that do not have an underlying vowel (2). Of particular theoretical interest, however, is the fact that the *hənqəmínəm* ə-epenthesis parsing strategy does not apply within all morphosyntactic domains. The first context is shown in (3): there is a small set of obstruent-only grammatical clitics that systematically surface without vocalic support (3a, b). As seen in (3c), resonants behave differently: if not adjacent to an underlying vowel, resonants in this context and everywhere else (see 5) are parsed into a ə-headed syllable.

The second context entails considerable opacity: as seen in (4), there is no surface predictability in how many voiceless obstruents may occur at the left margin of a lexical category word before encountering an epenthetic [ə]. However, if word-internal morphological structure is taken into account, as in the third column of (4) where the left bracket “[” marks the internal root edge, the following generalizations emerge. Within the domain initiated by the left edge of the Root and extending to the end of the word, obstruents are exhaustively parsed into syllables headed by a vocalic nucleus – either an underlying vowel or an epenthetic [ə]. Complex onsets, as in (2), tolerate a maximum of 2 obstruents: *[OO is violable but *[OOO is not. Aside from this length constraint, root-initial onset clusters exhibit considerable freedom of occurrence with respect to Place, Manner, and Laryngeal properties.

Within the prefix domain, however, there is no evidence that obstruent clusters are syllabified. First, there is no ə-epenthesis into an obstruent string: data in (4c-e) present sequences where the complex onset constraints motivated in the root-bounded domain (see (2)) would be expected to trigger ə-epenthesis. Note in (5) that resonants in the prefix domain *are* systematically parsed by ə-epenthesis, thus underscoring yet further the prosodically anomalous behaviour of the obstruents. Secondly, obstruent sequences in the prefix domain are subject to sequential phonotactic constraints (see (6)) that do not obtain in the domain initiated by the left root edge. Most interestingly, with respect to PLACE, all prefix obstruents are Coronal, which is in accord with the familiar cross-linguistic observation about extra-syllabic segments, though other examples in the literature generally entail a single segment.

It is proposed in (7) that non-exhaustive parsing is formally interpretable in terms of the progressively higher ranking of DepNuc along a Parse-Seg-to-σ schema that is articulated with respect to the fixed rankings inherent in both the Sonority Hierarchy (7a) and the M_{Cat} Hierarchy (7b). The intersection of the fixed-ranked M_{Cat} hierarchy with Parsing constraints accounts for why it is the case cross-linguistically that ‘stray’ segments generally occur in the context of affixal morphology at the margins of words, and why such segments are obstruents. Not parsing O sequences in the *hənqəmínəm* prefix domain, as in (8), further accounts for their manifest independence from constraints on ProperHeadedness and *ComplexOnset.

Constraints on the Sequencing and Syllabification of Obstruents: Data and Selected References

(1) Nuxalk (Bella Coola): does not invoke a [ə]-epenthesis strategy for parsing obstruents

- a. ɣ̣p̣sttɣ *Taste it!* (Hoard 1978:68)
 b. x̣ṭp̣ɣ̣ẉṭṭp̣ṭṣ ḳẉč̣ *Then he had had in his possession a bunchberry plant.* (Nater 1984:5)

(2) həṇq̣əmịṇə̣ṃ: [ə]-epenthesis parses obstruent-only sequences in lexical category words

- a. /č̣q̣ẉ/ č̣əq̣ẉ *get pierced*
 /č̣q̣ẉ-t/ č̣əq̣ẉət *pierce something (-t.transitivizer)*
 b. /č̣ḳẉɣ/ č̣əḳẉɣ *get fried*
 /č̣ḳẉɣ-t/ č̣əḳẉɣt *fry it (-t.transitivizer)*
 c. /ts/ təs *arrive there*
 /ts-t/ tsət *approach it (-t.transitivizer)*
 d. /ɣ̣x̣ẉ/ ɣ̣əx̣ẉ *to get beaten (in a game, competition)*
 /ɣ̣x̣ẉ-t-m/ ɣ̣əx̣ẉətəm *he was beaten (-t.transitivizer, -m intransitive)*

(3) 2nd position Subject pronoun clitics:

- a. č̣x̣ẉ 2 s Subject *neṃ č̣x̣ẉ ya:ys* *you go to work!*
 Aux 2sSu work
 b. ct 1 p Subject *čew-ət ct ce?* *we'll help him/her*
 help-tr 1pSu Fut
 c. cən 1 s Subject *neṃ cən ce? ya:ys* *I'll go to work.*
 *cn Aux 1sSu Fut work

- (4) a. ṭətɣt OəOOO [ṭətɣt *shake it back and forth*
 b. ɣ̣p̣ət OOəO [ɣ̣p̣ət *gather, put something together*
 c. c̣ṭ^əəɣtən OOOəOO... #c̣ṭ- [ṭ^əəɣ-tən *to die of poison [WS]*
 d. ʃx̣ẉθ̣q̣əstən OOOOəOO... #ʃ-x̣ẉ- [θ̣q̣-əs-tən *ridge pole support [AG]*
 e. tx̣ẉṣ?əṭtən OOOOəOO... #tx̣ẉ-s-[?əṭtən *to buy food*

- (5) a. nəx̣ẉṣṭəḳẉxən RəOOOəOO... #nəx̣ẉs- [ṭəḳẉ=xən *always tripping*
 e. x̣ẉənsnet OəRORəO #x̣ẉən-s-[net *to be still night*

(6) **Phonotactic constraints** on obstruents in the MWd prefix domain:

- MANNER: Only the initial segment may be stop or affricate; all non-initial Os are fricatives.
- PLACE: All segments are COR, specifically /t c č ɣ s ṭ x̣ x̣ẉ/ (where /x̣ x̣ẉ/ = COR-DOR)

(7) **Non-Exhaustive Parsing**

- a. Sonority Hierarchy: PARSE-V-to-σ >> PARSE-R-to-σ >> PARSE-O-to-σ
 b. MCat Domain Hierarchy: Root >> Stem >> Word

(8) **həṇq̣əmịṇə̣ṃ analysis:**

- a. PARSE-R-to-σ is never violated in həṇq̣əmịṇə̣ṃ.
 b. PARSE-O-to-σ is violable in the prefixal MWd domain in həṇq̣əmịṇə̣ṃ:
 • PARSE-O-to-σ/MRoot >> DepNuc >> PARSE-O-to-σ/MWord

Selected References

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