MORPHOLOGICAL BOUNDARY GLOTTALS IN A'INGAE: A NEW ARGUMENT FOR [δ]

1 OVERVIEW I describe and analyze patterns of syntactically conditioned allomorphy observed in A'ingae (or Cofán, ISO 639-3: con), an indigenous isolate spoken by ca. 1,500 Cofán people in Ecuador and Colombia (Dąbkowski, 2021). Three information structure (IS) morphemes—the new topic *-(ʔ)ta* NEW, contrastive topic *-(ʔ)ja* CNTR, and exclusive focus *-(ʔ)yi* EXCL—are realized as plain (i.e. non-preglottalized; *-ta*, *-ja*, *-yi*) most of the time, but as preglottalized (*-ʔta*, *-ʔja*, *-ʔyi*) only when attaching to TPs. I propose that the glottal stop (*-ʔ*) is a spell-out of T° conditioned by linear adjacency to a higher-order *discourse* feature [δ] (Bossi et al., 2019; Mikkelsen, 2015) that dominates all the specific IS features in a feature hierarchy. By documenting an overt realization of a vocabulary item conditioned by [δ], I provide novel morphological evidence for a hierarchical arrangement of discourse features, and of Ā-feature geometry more broadly (e.g. Aravind, 2018; Baclawski, 2019; Baier, 2018). All the data were collected by the author.

2 BACKGROUND A'ingae is a highly agglutinating and exclusively suffixing language. A'ingae verbs (and non-verbal predicates) can be highly inflected, with suffixes expressing a variety of grammatical categories, such as aspect, subject number, reality status, and polarity. Most of the language's functional morphemes have the form of either -CV or -ʔCV; only the IS markers show an allomorphic alternation between -CV and -ʔCV.

3 DATA The IS markers are generally optional and may appear on different lexical categories. When attached to most constituents, including e.g. noun phrases (1a), adverbs (2a), and clauses subordinated overtly with C-heads such as the same-subject adjunct *-pa* SS (3a), different-subject adjunct *-si* DS, or the different-subject conditional antecedent *-ʔni* IF.DS (4a), they are realized as plain (i.e. non-preglottalized). However, when attached directly to infinitive (1b, 2b) or finite predicates (3b, 4b), they are realized as preglottalized. (In 4b, *-ta* NEW surfaces as *-nda* due to nasal spreading.) Finite clauses with preglottalized IS suffixes are interpreted as same-subject conditional antecedents (3b, 4b). (In §4, this will be attributed to the presence of a null same-subject conditional C°.) The IS markers do not appear on matrix predicates. Throughout the abstract, the IS markers are underlined.

(1) PLAIN REALIZATION

a. *yáya-ta =tsû tsámpi-ni já*
dad=NEW =3 forest=LOC go
"Dad went hunting."

PREGLOTTALIZED REALIZATION

b. *ñúʔfa-ye-ʔta =ngi atésû*
rest-INF-NEW =I HAB.AUX
"I (habitually) rest."

(2) a. *tayúpi-ja fíthi~ʔthi =tsû*
long ago-CNTR kill~PLA =3
"Once upon a time, (s)he killed (many)."

b. *kéʔi án-ʔfa-ye-ʔja séʔpi =ngi*
2PL eat-PL-INF-CNTR forbid =I
"I prohibit y'all from eating."

(3) a. *já-ya-pa-yi =ngi ína-ʔjen*
go-IRR-SS-EXCL =I cry-IPFV
"I'm crying only because I will leave."

b. *thési-ma áthe-ʔyi =ngi bûthú-ya*
jaguar-ACC see-EXCL =I run-IRR
"Only if I see a jaguar, I will run."

(4) a. *jí-ʔni-nda =ngi íʔna-ña*
come-IF.DS-NEW =I cry-IRR
"If (s/he) comes, I will cry."

b. *jí-mbi-ʔta =tsû án-ña*
come-NEG-NEW =3 eat-IRR
"If (s)he doesn't come, (s)he will eat."

MAIN GENERALIZATION: A glottal stop is realized before an IS morpheme if and only if the IS morpheme is attached to a verb without any overt subordinating morphology.

4 ANALYSIS A'ingae subordinate clauses can be inflected for features such as subject plurality (*-ʔfa* PL; 2b), reality status (irrealis *-ya* IRR; 3a), polarity (negative *-mbi* NEG; 4b), and finiteness (infinitive *-ye* INF; 1b, 2b). This suggests that subordinate clauses consist of at least the TP layer (and also may have an overt (3a, 4a) or phonologically null CP layer). Positive realis singular-subject clauses are morphologically unmarked. Consequently, the verb of a finite TP may be identical to a bare verbal root.

The three IS markers form a natural class—they all encode discourse meanings, attach to the same range of constituents, and appear at the very end of a phrase. As such, the observed systematic alternation between their -CV and -ʔCV forms should be attributed to a shared morphosyntactic property. Specifically, I propose that

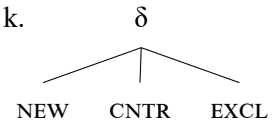
the three IS morphemes inherit from a superordinate *discourse* feature [δ] (Bossi et al., 2019; Mikkelsen, 2015), which dominates all the specific IS features, such as new topic [NEW], contrastive topic [CNTR], and exclusive focus [EXCL]. A minimally differentiated hierarchical organization of the relevant IS features is given in (5k).

(5) T-FEATURES
a. INF ⟷ *-ye*
b. T ⟷ *-ʔ* / _ δ
c. T ⟷ -∅ / elsw.

C-FEATURES
d. SS ⟷ *-pa*
e. DS ⟷ *-si*
f. IF.SS ⟷ -∅
g. IF.DS ⟷ *-ʔni*

IS MARKERS
h. NEW ⟷ *-ta*
i. CNTR ⟷ *-ja*
j. EXCL ⟷ *-yi*

IS FEATURE HIERARCHY
k.



T° is realized as a glottal stop when adjacent to [δ] (5b). Since *-ta* NEW, *-ja* CNTR, and *-yi* EXCL all inherit from [δ], they all satisfy this environment condition. Otherwise, T° is realized as phonologically null (5c). The same-subject conditional antecedent C-head is likewise unpronounced (5f). This derives the observed distribution of the IS-conditioned *-ʔ* (6-8). The constituent an IS marker attaches to is bracketed [ ].

(6) PLAIN REALIZATION
a. [*yáya*]$_{DP}$*-ta* =*tsû tsámpi-ni já*
dad=NEW =3 forest=LOC go
"Dad went hunting."

PREGLOTTALIZED REALIZATION
b. [*ñúʔfa-ye-ʔ*]$_{TP}$*-ta* =*ngi atésû*
rest-INF-T-NEW =I HAB.AUX
"I (habitually) rest."

(7) a. [*tayúpi*]$_{advP}$*-ja fíthi~ʔthi* =*tsû*
long ago-CNTR kill~PLA =3
"Once upon a time, (s/he) killed (many)."

b. [*kéʔi án-ʔfa-ye-ʔ-*∅]$_{CP}$*-ja séʔpi* =*ngi*
2PL eat-PL-INF-T-C-CNTR forbid =I
"I prohibit y'all from eating."

(8) a. [*já-ya-*∅*-pa*]$_{CP}$*-yi* =*ngi ína-ʔjen*
go-IRR-T-SS-EXCL =I cry-IPFV
"I'm crying only because I will leave."

b. [*thési-ma áthe-ʔ-*∅]$_{CP}$*-yi* =*ngi bûthú-ya*
jaguar-ACC see-T-IF.SS-EXCL =I run-IRR
"Only if I see a jaguar, I will run."

When an IS marker attaches to most syntactic categories, including DPs (6a) and adverbs (7a), there is no T° adjacent to a discourse-marked morpheme. As such, *-ʔ* is not realized. When an IS marker attaches immediately to an infinitive TP (e.g. a complement of a raising predicate), the adjacent T-head is realized as *-ʔ* (6b). When an IS marker attaches to CP with overt subordinating C°, overt material intervenes between T° and the IS marker. Since environments conditioning allomorphy are strictly local (Embick, 2010, 2015), *-ʔ* is not realized (8a). (The assumption that infinitival morphology is TP-internal, while subordinating morphemes are C-heads, is widely accepted cross-linguistically (Adger, 2003), and corroborated for A'ingae by Dąbkowski, 2022, 2023.) However, when an IS marker attaches to a CP with a null C°, such as a complement of a control predicate (7b) or a same-subject conditional antecedent (8b), there is no overt morphology intervening between T° and the IS marker. Since phonologically unrealized material is ignored for purposes of satisfying allomorphy environments (*pruning* in Embick, 2010, 2015), T° is realized as *-ʔ*.

5 DISCUSSION The above analysis draws on the notion of *discourse differentiation*, proposed by Mikkelsen (2015) to account for the fact that in Danish (North Germanic), Spec-CP must be filled by an IS-distinguished element (a topic, focus, WH-phrase, rhetorical relation), but is not dedicated to a single discourse function. Bossi et al. (2019) formalizes this notion as a superordinate discourse feature [δ] to capture the word-order facts in Kipsigis (Nilo-Saharan), where the immediately post-verbal position is occupied by a DP that is *prominent*, but may likewise instantiate one of many different discourse functions. By showing that all of the A'ingae IS morphemes pattern alike in triggering an allomorphy of T°, the current paper provides novel morphological evidence for a hierarchical arrangement of discourse features, with [δ] inherited by all the maximal IS features.

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