PHASAL STRENGTH IN A'INGAE CLASSIFYING SUBORDINATION

In this paper, I describe and analyze the patterns of stress and glottalization on verbs suffixed with subordinating complementizers in A'ingae (or Cofán, ISO 639-3: con), an understudied and endangered Amazonian isolate. The stress of subordinated verbs depends on prior inflection present on the verb, contradicting an otherwise robust generalization that morphosyntactic information from internal cycles is not accessible at later stages of the derivation (*bracket erasure* in Kiparsky, 1982). To account for the A'ingae data, I extend McPherson and Heath's (2016) PHASEFAITHFULNESS to distinguish between functional (AspP, TP) phases and categorizing (*n*P, *v*P) phases. The spell-out of the former, but not the latter, blocks stress overriding, deriving the A'ingae patterns. All the data were collected by the author.

(1) [[[[***indi*** ***-án***]$_{vP}$ *-ʔje* *-ʔngi*]$_{AspP}$ *-ʔfa* *-ya*]$_{TP}$
be fermented -CAUS -IPFV -PROX -PL -IRR
"(they$_{PL}$) will$_{IRR}$ come$_{PROX}$ to be$_{IPFV}$ fermenting$_{CAUS}$, ..."

1 BACKGROUND A'ingae is an agglutinating and suffixing language. Building on Author (t.a.), I assume that the verbal head of a TP can undergo up to three phonological evaluations (or phasal spell-outs) (1), corresponding to the *v*P (the root and optionally *-an/-en/-ña* CAUS), AspP (with suffixes such as the aspectual *-ʔje* IPFV or ass. motion *-ʔngi* PROX), and TP (including *-ʔfa* PL, *-mbi* NEG, *-ya* IRR). Phase heads are spelled out with their complements (Bošković, 2016). Spelled-out phases are delimited with square brackets [ ]. Acute accent (´) and **boldface** mark stress. Following Author (t.a.), phases headed by categorizers (*n*P, *v*P) always undergo spell-out, while functional phases (Asp, TP) are spelled out only if at least one phonologically overt morpheme is introduced in that phase. (This assumption will be vindicated in §4.1 and §4.2.)

2 DATA A'ingae has a rich set of classifying suffixes (Fischer and Hengeveld, 2023), which characterize the shape, size, or prominent dimension of the referent. Here, I focus on two representative ones: the delimited space classifier *-khû* DLM and the place classifier *-ʔthi* PLC. The classifiers can derive deverbal (2a,c) and denominal (2b,d) nouns. The resulting semantics is not fully predictable.

(2) a. / ***rúʔ***nda *-khû* / [*ru**ndák**hû*]
wait -DLM
"waiting room"

b. / ***á***ru *-khû* / [*a**rú**khû*]
rice -DLM
"rice field"

c. / ***á***fase *-ʔthi* / [*a**fá**seʔthi*]
offend -PLC
"offending place"

d. / ***ú***maʔndu *-ʔthi* / [*u**má**nduʔthi*]
macaw -PLC
"macaws' place"

When attaching to a root, the following STRESSALGORITHM (later abbreviated SA) applies: (i) delete base stress and glottalization (if present), (ii) if the suffix has a glottal stop, stress the second syllable to its left (2c,d), otherwise (iii) assign stress to the penultimate syllable (2a,b). This stress pattern is regular in that it characterizes a large class of A'ingae morphemes, including all the classifiers. (For an OT analysis of the ALGORITHM and more on A'ingae stress classes, see Author, t.a.)

A classifier can also attach to a full inflected clause (delimited with ⟦ ⟧ in 3), yielding a subordinate clause which retains the classifier's semantics (underlined). I assume that in their subordinating function, the classifiers always attach to TPs. (This assumption will be vindicated in §4.1). Subordinate clauses are verb-final; the verb and the classifier form one phonological word.

(3) *jayi=ngi* ⟦ *tiseʔpa* *aʔi=ma* [[***séje*** *-ʔje*]$_{AspP}$ *-ʔfa*]$_{TP}$ ⟧ *-khû* *=nga*
going=I they person=ACC heal -IPFV -PL DLM =to
"I'm going to the room where they were healing a person."

The surface stress and glottalization of the subordinate verb depend on the verb's inflection. When a classifier attaches to a clause whose verb does not have any suffixes outside of *v*P, i.e. consists only of a bare root (4-5a) or a root followed by the causative suffix (4-5b), input stress and glottalization are deleted, and stress is assigned following the ALGORITHM, i.e. to the penult of forms with *-khû* DLM (4a-b) and and to the second syllable left of *-ʔthi* PLC (5a-b). However, if the verb contains AspP (4-5c) and/or TP (4-5d) inflection, input stress and glottalization are preserved.

a. [ROOT]$_{v\text{P}}$-CL b. [ROOT-...]$_{v\text{P}}$-CL c. [ROOT-...]$_{\text{AspP}}$-CL d. [ROOT-...]$_{\text{TP}}$-CL

(4) a. / ***án***saʔnge -khû / b. / ***kúi?*** -ña -khû / c. / ***fé***tha -ʔje -khû / d. / ***á***kheʔpa -mbi -khû /
[ansa***ngé***khû] [kûi***ñá***khû] [***fé***thaʔjekhû] [***á***kheʔpambikhû]
be shy -DLM drink -CAUS -DLM open -IPFV -DLM forget -NEG -DLM

(5) a. / ***án***saʔnge -ʔthi / b. / ***kúi?*** -ña -ʔthi / c. / ***fé***tha -ʔje -ʔthi / d. / ***á***kheʔpa -mbi -ʔthi /
[an***sán***geʔthi] [***kúi***ñaʔthi] [***fé***thaʔjeʔthi] [***á***kheʔpambiʔthi]
be shy -PLC drink -CAUS -PLC open -IPFV -PLC forget -NEG -PLC

3 ANALYSIS To account for the above pattern, I index McPherson and Heath's (2016) PHASE-FAITHFULNESS to phase type, distinguishing between faithfulness to categorizing (xP) and functional (XP) phases. Specifically, MAXIMALITY$_{x\text{P}}$ (M$_{x\text{P}}$) is violated by deleting stress/ʔ spelled out within vP or nP. MAXIMALITY$_{\text{XP}}$ (M$_{\text{XP}}$) is violated by deleting stress/ʔ which had undergone AspP or TP spell-out. The A'ingae pattern results from ranking M$_{\text{XP}}$ ⟫ SA ⟫ M$_{x\text{P}}$. If no overt AspP/TP morphology is present, only vP undergoes spell-out. Since SA ranks above M$_{x\text{P}}$, the base stress/ʔ are overridden (6a). Otherwise, AspP/TP undergoes spell-out and M$_{\text{XP}}$ prevents stress/ʔ overriding (6b).

(6) a. [***án***saʔnge]$_{v\text{P}}$ -khû M$_{\text{XP}}$ ⟫ SA ⟫ M$_{x\text{P}}$

	i. ***án***saʔngekhû	∗!	
☞	ii. ansa***ngé***khû		∗

[be shy]$_{v\text{P}}$ -DLM

b. [***fé***tha-ʔje]$_{\text{AspP}}$ -ʔthi M$_{\text{XP}}$ ⟫ SA ⟫ M$_{x\text{P}}$

☞	i. ***fé***thaʔjeʔthi		∗
	ii. fe***thá***jeʔthi	∗!	

[open-IPFV]$_{\text{AspP}}$ -PLC

4 REJECTED ALTERNATIVES Now, I consider and reject two attempts at a simpler analysis.

4.1 *Homophony analysis* To avoid PHASEFAITHFULNESS, one could propose that all the classifiers are homophonous between stress/ʔ-deleting nominalizers which attach low (above n and v) and stress/ʔ-preserving subordinators which attach high (to full TPs). Nonetheless, subordinated clauses headed by verbs with no overt AspP/TP inflection are TPs (compatible with TP adverbs, e.g. *tayúpi* 'long ago'), but stress/ʔ is overridden (7). Thus, the homophony analysis is untenable.

(7) *jayí=ngi* ⟦ *dû́ʔshû tíse máma=me tayúpi* [ru***ndá***] ⟧ *-khû =nga* (cf. / ***rú?***nda / in 2a)
going=1 child (s)he mom=ACC2 long ago wait -DLM =DAT
"I'm going to the room where the child waited for their mom a long time ago."

4.2 *Non-phasal n, v* To do away with xP/XP-indexation, one could try denying the categorizing heads' phasal status. This incorrectly predicts no phase boundaries between adjacent classifiers. In A'ingae, when two ʔ's are introduced by suffixes in the same phase, stress is assigned wrt. the first one (8a) (Author, t.a.). When the ʔ's are introduced in consecutive phases, the later ʔ overrides the stress assigned by the previous ʔ. In words with multiple nominalizing classifiers, stress is cyclically overridden (8b). By def., nominalizers are n heads. Hence, n (and v) are phasal.

(8) a. / ***khú?***pa -ʔje -ʔngi / [***khú***paʔjeʔngi]$_{\text{AspP}}$ excrete -IPFV -PROX
b. / ***khú?***pa -ʔthi / [***khú***paʔthi]$_{n\text{P}}$ -ʔkhu / [khu***pá***thiʔkhu]$_{n\text{P}}$ excrete -PLC -ANG

5 DISCUSSION A'ingae complies with M$_{\text{XP}}$ ⟫ SA ⟫ M$_{x\text{P}}$. Since prosodic strength generally increases with projection height, the reverse M$_{x\text{P}}$ ⟫ SA ⟫ M$_{\text{XP}}$ is highly unexpected. I speculate that M$_{\text{XP}}$ ⟫ M$_{x\text{P}}$ is part of UG, akin to McCarthy and Prince's (1995) ROOT ⟫ AFFIXFAITHFULNESS metacondition. In conclusion, I contribute to a growing body of research which distinguishes between functional and categorizing phase heads (e.g. Newell, 2008; Guekguezian, 2021) by demonstrating—for the first time—that this distinction must be accessible to the phonological grammar.

Author (t.a.). "Two grammars of A'ingae glottalization: A case for CbP." In: *NLLT*. Bošković (2016). "What is sent ..." In: *Linguistica* 56.1. Fischer and Hengeveld (2023). "A'ingae (Cofán/Kofán)." In: HSK 44. McPherson and Heath (2016). "Phrasal ..." In: *NLLT* 34.2. Newell (2008). "Aspects of ..." PhD thesis.