## **Complementation in Avatime**

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blakelehman@ucla.edu tjmajor@ucla.edu htorrence@humnet.ucla.edu

### 1 Introduction

We investigate the complementizer system in Avatime (Kwa: Ghana), including the inventory of complementizers, the verbs that select them, and the selectional properties of the complementizers themselves.

#### Goals in this presentation:

- Provide an overview of the complementizer inventory of Avatime, primarily focusing on distribution and some basic interpretive properties.
- Describe the selectional relationships between verbs, complementizers, and the clauses they embed.
- Contribute novel data from Avatime to the typology of complementation in African langauges and beyond.
- Draw attention to some interesting properties of Avatime that may open discussion or new directions for the complementation and selection Afranaph sister project.

# 2 Language Background

Avatime is an endangered Kwa language spoken in the Volta Region of Ghana.



Figure 1: Map of Avatime-speaking region

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- Majority of Avatime speakers are situated east of Lake Volta, approximately 30 miles from Ho, the regional capital.
- Classified as a Ghana-Togo Mountain language (also "Central Togo" or "Togo Remnant" languages), which consists of about 15 languages.
- It is also known as Siya or Sideme.
- Approximately 24,000 speakers (Ethnologue); our speakers are from Vane, Amedzofe, Gbadzeme, and Fume.

Avatime has SVO basic word order (but also prepositions/postpositions and a subset of non-finite clauses are OV):

(1) Ayapε a-kla ke-plekpà Ayapε 3sg.pfv-read cl-book"Ayape read the book."

The number of level tones, 3 or 4, has been a point of disagreement in the literature. For the present, we limit our transcription to three tones:<sup>1</sup>

Superhigh	á
High	a
Low	à

Table 1: Three level tones in Avatime

As is typical of Ghana-Togo Mountain languages, Avatime has a rich noun class system (and noun class concord):

ó-dzε	"woman"
bá-dzε	"women"
ò-hà	"pig"
ì-hà	"pigs"
ki-kù	"yam"
bi-kù	"yams"
ku-de	"road"
be-de	"roads"
ke-plekpa	"book"
kù-plekpa	"books"

Table 2: Avatime noun classes

<sup>&</sup>lt;sup>1</sup>For a more careful discussion of Avatime tones, see Ford (1971); Schuh (1995); Defina (2016); Van Putten (2014). We have omitted tone 2 (the mid-tone).

Tense, aspect, mood, and person are marked indicated with portmanteau prefixes on the verb:2

(2) a. ma-tà kı-mımı- $\hat{\epsilon}$ 1sg.pfv-eat cl-rice-def

'I ate rice'

b. mě-tà kı-mımı-ê 1sg.prog-eat cl-rice-def 'I am eating rice.'

(3) a. a-tà kı-mımı- $\hat{\epsilon}$  3sg.pfv-eat cl-rice-def 'S/he ate rice.'

b. ă:-tà kı-mımı-ĉ 3sg.fut-eat cl-rice-def 'S/he will eat rice.'

## 3 Complementizer system overview

Working Definition: all elements that merge into the C-domain are *complementizers*, which includes question/focus particles and clausal subordinators.

## 3.1 Interrogative Particles

In interrogative constructions, there are (at least) two different Q-particles.

(4) Àyapè a-sè (na)? Ayape 3sg.pfv-leave NA "Did Ayape leave?"

(5) Wò-zulu ege **(na)**? 2sg.pfv-steal what (NA) "What did you steal?"

- (4) illustrates that *na* is optional in polar questions.
- (5) shows that *na* is optionally present in wh-questions as well. When *na* is absent, *ege* takes a falling tone.

Avatime allows for wh-in-situ and wh-movement.

(6) **egé** wɔ-ŋà (na) what 2sg.pfv-eat Q "What did you eat?"

(7) wɔ-ŋà **ege** (na) 2sg.pfv-eat what Q "What did you eat?"

<sup>&</sup>lt;sup>2</sup>The distribution and semantic contribution of the "DEF" (inite) suffixes is not clear

• As the examples show, the qustion particle is (apparently) optional whether there is wh-movement or not (cf. Cheng (1997)).

The second Q-particle is *le*, as shown in (8):

(8) egé Mérì e-dzi **lě**? what Mary 3sg.pfv-buy LE "What did Mary buy?"

Both of these Q-particles can occur in embedded clauses:

- (9) ayapê e-ví sì egé mérì e-dzi **na** Ayape 3sg.pfv-ask sı what Mary 3sg.pfv-buy NA "Ayape asked what Mary bought."
- (10) ayapê e-vî sì egé mérì e-dzi **le/na**Ayape 3sg.pfv-ask sı what Mary 3sg.pfv-buy le/na
  "Ayape asked what Mary bought."

The two Q-particles, *le* and *na* are not able to co-occur in either order (11):

- (11) a. \* ege meri e-dzi le na
  what Mary 3sg.pfv-buy le na
  Int: "What did Mary buy?"
  b. \* ege meri e-dzi na le
  what Mary 3sg.pfv-buy na le
  int: "What did Mary buy?"
  - It is unclear whether the complementary distribution of these particles results from *le* and *na* competing for the same position (and thus cannot co-occur) or a semantic/pragmatic incompatibility.
  - The extent to which these Q-particles is "optional" as opposed to discourse-conditioned requires more research.
    - When *na* is present, it often means that the question is already salient or presupposed in the discourse.

There is also an "incredulous" particle that occurs in wh-questions:

- (12) egé e-dzi **úún** what 3sg.pfv-buy Q "WHAT did she buy?"
- (13) egé wò-bù sì mérì e-dzi **úún** what 2sg.pfv-think si Mary 3sg.pfv-buy Q "WHAT do you think that Mary bought?"
  - This particle could be used if, for example, I am sure that Mary is broke. You come to me and say that you saw Mary buying lots of things at the market.
  - Thus, it seems to lend a 'wh-the-*hell*' flavor to the question.

### 3.1.1 Exclamative Particles

There is an exclamative or surprise particle that occurs on the right edge of the clause:

- (14) Àyapè a-sè **lo**! Ayape 3sg.pfv-leave lo "Ayape left!"
  - Surprisingly, there doesn't seem to be any other segmental focus particle. (Left peripheral focus is indicated by a superhigh tone on the right edge of focused constituent and/or movement.)

### 3.2 The "say" complementizer si

Avatime has one complementizer-like element, si, that is homophonous with the lexical verb "say" (15b):

- a. Kofi sì a-sè.
  Kofi pfv.say 3sg.pfv-leave
  "Kofi said that s/he left."
  b. \*(mε/a/bε) sì a-sè.
  1sg/3sg/3pl pfv.say 3sg.pfv-leave
  "I/(s)he/they said that s/he left."
  - As a verb, si uniquely does not exhibit agreement with full DP subjects (Kofi above).
  - In the absence of a DP subject, subject markers canonically occur.

In certain contexts, si occurs on the left edge of the clause and introduces a hearsay/evidential flavor:

- (16) sì mérì e-zuru ke-plekpà sı Mary 3sg.pfv-steal cl-book "People are saying/it is said that Mary stole a book."
  - It is unclear as to where *si* merges into the structure.
  - No agreement appears on *si* here (as was the case when it functions as a main verb.
  - This element could be an impersonal form of the verb "say".

There is also a si element that introduces complement clauses that roughly resemble root clauses (17b):

- a. mérì e-dzi lì-mwɛ-nɛ̂.

  Mary 3sg.pfv-buy cl.pl-orange-def

  "Mary bought oranges."
  b. Àyapè e-bù sì Mérì e-dzi lì-mwɛ-nɛ̂.

  Ayape 3sg.pfv-think si Mary 3sg.pfv-buy cl.pl-orange-def

  "Ayape thinks that Mary bought oranges."
  - The declarative complement clause in (17b) is essentially indistinguishable from a root clause (17a).

In addition to introducing declarative clausal complements, si can also introduce indirect questions with verbs like vi "ask" (18), where it embeds wh-interrogatives (18a)-(18c) and polar questions (18d):

(18) a. àyapè e-vi sì egé Mérì e-dzi (na/lě).

Ayape 3sg.pfv-ask si what.foc Mary 3sg.pfv-buy (na/le)

"Ayape asked what Mary bought."

b. àyapè e-υi mέ sì nyawέ e-dzi bi-kù-wè

Ayape 3sg.pfv-ask 1sg si who.foc 3sg.pfv-buy cl.pl-yam-cl.det

"Ayape asked me who bought yams."

c. àyapè e-vi mé sì nìfə mary e-dzi bi-kù-wè

Ayape 3sg.pfv-ask 1sg si where.foc Mary 3sg.pfv-buy cl.pl-yam-cl.det

"Ayape asked me where Mary bought yams."

d. àyapè e-vi sì Mérì e-dzi bi-kù-wè (na/lě).

Ayape 3sg.pfv-ask si Mary 3sg.pfv-buy cl.pl-yam-def (NA/LE)

"Ayape asked whether Mary bought yams."

si is the only complementizer that occurs with manner of speaking (e.g. "tell" or "yell") predicates (19):

(19) a. kofí e-do \*(sì) Ayápe a-sè.

Kofi 3sg-pfv.tell si Ayape 3sg-pfv.leave

"Kofi said that Ayape left."

b. kofi a-kpe o-zi-lo \*(sì) Ayápe a-sè.

Kofi 3sg.pfv-make cl-yell-def si Ayape 3sg-pfv.leave

"Kofi yelled that Ayape left."

In addition to being able to embed ordinary finite clauses, *si* also introduces a subset of subjunctive-like clauses (whose finiteness has not been established), such as (20):

(20) kòfí a-pε sì **yí**-vù ó-gbi-ε

Kofi 3sg.pfv-want si log.subj-catch cl-grasscutter-def

"Kofi wanted to catch a grasscutter."

#### 3.2.1 Embedding under gi

The complementizer *gi* functions as a relativizer, as shown in (21):

(21) a. mà-kpò o-nyé-lo **gì** e-dzi lì-mwɛ-nè-\*(è).

1sg.pfv-praise cl-person-dist gi 3sg.pfv-buy cl.pl-orange-def-\*(cl.det)

"I praised the man who bought oranges."

b. mà-kpò ká-lə gì ke-nà lì-mwe-nè-\*(è).

1sg.pfv-praise cl.it-dist gi cnc.pfv-eat cl.pl-orange-def-\*(cl.det)

"I praised the one (dog) that ate the oranges."

• The right edge of a relative clause has an obligatory "clausal determiner". The semantic contribution of the clausal determiner is unclear.

<sup>&</sup>lt;sup>3</sup>Such determiners are found in a number of Kwa languages from different branches of Kwa (Akan (Boadi, 1972, 2005; Saah, 2010); Ga (Korsah, 2017); Gungbe (Aboh, 2005); Ikpana (Dorvlo, 2008); Krachi (Kandybowicz and Torrence, 2019)).

gi introduces a subset of temporal adjunct clauses:

- (22) a. gì mà-mò vinsint i
  GI 1sG.PFV-see Vincent CL.DET
  "when I saw Vincent..."
  - b. a-gì mà-mò vinsint i A-GI 1sg.pfv-see Vincent CL.DET "when I saw Vincent..."
  - We are uncertain what the precise status of the a- marker preceding gi is.
  - There is no clear semantic difference between the two cases in (22).

#### 3.2.2 xe

The element *xe* introduces a variety of subordinate clauses, including temporal adjunct clauses (23):

(23) ma-tó a-uana xé (ablɔ) mérì a-ba 1sg.pfv-cook cl.pl-bean xe now Mary 3sg.pfv-come "I cooked beans before Mary arrived."

When it is selected by an interrogative matrix predicate, xe introduces indirect questions (24a):

- (24) a. me-ví méri xé àyapè e-zuru ke-plekpa na 1sg.pfv-ask Mary xe Ayape 3sg.pfv-steal cl-book NA "I asked Mary whether Ayape stole the book."
  - b. me-te xé (gì) mérì e-dzi a-υana (ε)
     1sg.pfv-know xe gi mérì e-dzi cl.pl-bean cl.det
     "I know whether Mary bought beans."

*xe* also introduces some conditionals (25):

- (25) a. xé ma-mɔ mérì i, ma-kpε ò-zi-lò xε 1sg-see Mary CL.DET 1sg-IMPV-put CL-voice-DEF "If I see Mary, I will scream."
  - b. xé e-gbo-là sì le-kpè è, àyapè ɔ̃-tá-vù la. xe cl.pl-chair-def si cnc-fall cl.det, Ayape 3sg.neg-fut-catch cnc.pl "If the chairs fall, Ayape will not catch them."

#### **3.3 l**ε

There is another particle  $l\epsilon$  that sometimes functions as a complementizer (26).

(26) a-fɔsi mε lε mε-tɔ á-υanà ὲ 3sg.pfv-force 1sg Lε 1sg-cook CL.pL-bean CL.DET "He forced me to cook beans."

Like xe,  $l\epsilon$  also introduces temporal adjuncts (27)

(27) akós a-tó 5-gbì-ε lὲ ma-tá yε Akos 3sg.pfv-cook cl-grasscutter-def le 1sg.pfv-eat it "Akos cooked the grasscutter and ate it."

It should be noted that k cannot be substituted by e.g. si in most environments, but it can co-occur with si (where it is pronounced k):

- (28) wo-bu \*(sì) lεε me-kpìnì ó-dzε-lò
  2sg.pfv-think sɪ ιεε 1sg.pfv-insult cl-woman-DET
  "You think that I insulted the woman."
  - $l\epsilon$  seems to be rather restricted as a complementizer.
  - We return to similar cases of complementizer doubling later.
  - These disparate uses of  $l\epsilon$  suggest that there may be multiple homophonous elements.

## 4 Comparing complementizers

#### 4.1 Factivity and perception

Factivity does not seem to be a lexical property of verbs in Avatime, but rather correlates with morphosyntactic properties of complement clauses. When a verb like "remember" selects a *si* clause it is interpreted as non-factive (29), while the factive inference is triggered with *gi* clauses (30).

- (29) ma-pláŋu lɛ avà sì e-zuru ke-plekpà 1sg.pfv-put.face pron on si 3sg.pfv-steal cl-book "I have a recollection that s/he stole the book."
- (30) mà-pláŋu lε avà gì e-zuru ke-plekpa-(ε)
  1SG.PFV-put.face PRON on GI 3SG.PFV-steal CL-book-(CL.DET)
  "I remembered the fact that s/he stole the book."

Similar effects arise for (in)direct perception, as si gives rise to an interpretation involving indirect perception (31a), while gi is interpreted as direct (31b) and (31c):

- (31) a. mè-nu sì mérì e-zulu ke-plekpà 1sg.pfv-hear sı Mary 3sg.pfv-steal cl-book "I heard that Mary stole the book."
  - b. mè-nu gì mérì e-zulu ke-plekpà  $\epsilon$  1sg.pfv-hear gi Mary 3sg.pfv-steal cl-book cl.det

"I heard Mary stealing the book."

- c. mè-nu xé mérì e-zulu ke-plekpà ε
   1sg.pfv-hear xe Mary 3sg.pfv-steal cl-book cl.det
   "I heard about Mary stealing the book."
- Our general findings suggest that *si* indicates hearsay anchored to the subject (i.e. indirect perception or non-presuppositional).
- Embedding under gi is interpreted as direct and/or presuppositional.

### 4.2 Interrogative CPs

Both *si* and *xe* introduce interrogative CPs, while *gi* cannot (to our knowledge):

(32) me-ví mérì sì/xé/\*gi àyapè e-zuru ke-plekpa na 1sg.pfv-ask Mary si/xe/\*gi Ayape 3sg.pfv-steal cl-book NA "I asked Mary whether Ayape stole the book."

We have been unable to tease apart any differences between questions embedded by *si* and *xe*, but the disjunctive Q-particle *aloo* can occur at the left edge of only CPs introduced by *si*:

(33) mé-ví mérì sì/\*xé (alóó) àyapè e-zuru ke-plekpa na 1sg.neg.pfv-ask Mary sɪ/\*xe or Ayape 3sg.pfv-steal cl-book na "I didn't ask Mary whether Ayape stole the book."

Unlike si, xe does not allow the disjunction particle at the left edge of the clause (33).

## 5 Light nouns and the left periphery

Avatime allows for what appear to be CPs selected by higher verbs, but accompanied by lexical nominals:

- (34) me-nu lı-gab-wε sì Ayapè e-zuru ke-plekpà 1sg.pfv-hear cl-stupid-det sı Ayape 3sg.pfv-steal cl-book "I heard the nonsense that Ayape stole the book."
  - Recall that relative clauses in Avatime are introduced by gì, not si.

In addition to the lexical nouns that can appear on the left edge of embedded clauses, Avatime has a set of "light" nouns or a pronoun that can (or sometimes must) appear there:

- (35) a. me-dze lɛ/li-boe-le sì méri e-zulu ke-plekpà 1sg.pfv-forget pron/cl-issue-def sı Mary 3sg.pfv-steal cl-book "I forgot the issue that Mary stole the book."
  - b. me-bu (li-bóé)-le sú sì àyapè á-kla ke-plekpà
     1sg.pfv-think cl-issue-def su si Ayape 3sg.pfv-read cl-book
     "I think it that Ayape read the book."
  - c. Meri a-nàdà {lé/li-bwe-le} sì yé-zuru ke-plekpà Mary 3sg.pfv-deny pron/cl-issue-det si log-steal cl-book "Mary denied that she stole the book."
  - The light nominal root in the cases above, *li-boe-le*, has various translations into English e.g. "issue/affair/matter/word".
  - The  $l\epsilon$  is the pronominal form. These are reminiscent of cases in English where a verb selecting for a CP complement appears to select an expletive pronoun or nominal<sup>4</sup>
- (36) a. I don't like it/the fact/the news that he failed the test.
  - b. She mentioned it/the fact/the news that Susan had won the prize.

<sup>&</sup>lt;sup>4</sup>For related discussion, see e.g. (Postal and Pullum, 1988; Stowell, 1981)).

ke-plekpa

Avatime light nouns are part of a full nominal paradigm (distinctions in definitness and/or number are possible):

(37) me-dze (li-boe/e-boe/e-boa-tɔ) sì mźri e-zuru ke-plekpà 1sg.pfv-forget CL-issue/CL.pL-issue-INDEF si Mary 3sg.pfv-steal CL.pL-book "I forgot an issue/the issues/some issues that Mary stole books."

In addition, there is an NPI form of the light noun that is used in negative contexts:

(38) a. mé-dze liboe-boe sì méri e-zuru ke-plekpa 1sg.pfv-forget cl-affair-RED sı Mary 3sg.pfv-steal cl-book "I didn't forget any affair that Mary stole the book."

b. ó-ví me (li-bóé-bóé/\*lɛ/\*li-bóe-le) sì méri e-zuru

3sg.pfv.neg-ask 1sg cl-affair-RED/pron/cl-affair-det si Mary 3sg.pfv-steal cl.pl-book

"He didn't ask me anything whether Mary stole the book."

Avatime pronominals and light nouns are not content-less, as the light noun that appears (or its acceptability more generally) is dependent on properties of the selecting element:

(39) a. Kofi e-do lε. Kofi 3sg-pfv.say it

"Kofi said it."

b. \* Kofî sì le Kofî pfv.say it

Intended: "Kofi said it."

(40) a. Kofí e-do li-boé-to.

Kofi 3sg-pfv.say cl-something-indef

"Kofi said something."

b. \* Kofi si li-boe-to.

Kofi PFV.say CL-SOMETHING-INDEF

Intended: "Kofi said something."

These (pro)nouns are often used in environments where other languages would use ellipsis:

(41) mè-bù lε/li-boe-le 1sg.pfv-think it/cL-issue-def "I think so."

Light nouns can be wh-questioned. *liboe woli* can be selected by the verb *do* 'say' in some cases (42):

(42) li-boe wolí ayapè e-do CL-affair which Ayape 3sg.PFV-say "Which issue did Ayape say?"

However, the light noun kidie woli is compatible with a verb like "buy", but not "say":

(43) ki-di-e woli àyapè e-dzi/\*do CL-thing-DEF which Ayape 3sg.PFV-buy /say "Which thing did Ayape buy/\*say?"

(44) me-gu ku-nugu-yo ní e-boe tata su 1sg.pfv-gu cl-conversation-det loc cl-affair 3 side "I talked about 3 issues."

Let's briefly consider a lexical noun that introduces an embedded question, like 'question':

(45) mé-ví mérì kù-vi-vi 1sg.pfv-ask Mary Nom-ask-ask "I asked Mary a question."

Notice that it can occur with xe or si, neither of which occur with headed relative clauses:

- (46) a. mé-υí mérì kù-υí-υi xé àyapè e-zuru ke-plekpε na 1sg.pfv-ask Mary nmzr-ask-ask xe Ayape 3sg.pfv-steal cl-book:cl.det na "I asked Mary the question whether Ayape stole the book."
  - b. mé-ví mérì kù-ví-vi sì (alóó) àyapè e-zuru ke-plekpa na 1sg.pfv-ask Mary Nmzr-ask-ask sı or Ayape 3sg.pfv-steal cl-book na "I asked Mary the question whether Ayape stole the book."

In a question embedded under a negative matrix verb, the NPI form of the light noun or the lexical noun can occur with the NPI suffix *t*>*t*>:

- (47) mé-ví mérì li-boe-boe sì/\*xé àyapè e-zuru ke-plekpa na 1sg.neg.pfv-ask Mary cl-issue-issue si/\*xe or Ayape 3sg.pfv-steal cl-book na "I didn't ask Mary the question whether Ayape stole the book."
- (48) mé-ví mérì kù-ví-vi/li-boe tɔtɔ sì/\*xé àyapè e-zuru ke-plekpa na 1sg.neg.pfv-ask Mary cl-ask-ask/cl-issue NPI sɪ/\*xe or Ayape 3sg.pfv-steal cl-book na "I didn't ask Mary the question whether Ayape stole the book."

Syntactically, the light nouns interact with the kinds of answers that are felicitous to questions.

(49) ayapɛ e-bu {lɛ/li-boe-le/li-boe-tɔ} su sì mɛrì e-dzi ege Ayape 3sg.pfv-think pron/cl-affair-def/cl-affair-indef side si Mary 3sg.pfv-buy what "What does Ayape think that Mary bought?"

It is also possible to simultaneously wh-question the light noun:

- (50) **li-boe woli sú** àyapè e-bù sì mɛrì e-dzi **ege** CL-affair which SIDE Ayapè 3sg.pfv-think si Mary 3sg.pfv-buy what "Which affair does Ayape think that Mary bought what?"
  - (50) cannot be answered by a simple DP like "oranges", but rather requires a clausal answer (e.g. "He thinks that she bought oranges.").

Like Avatime, other Kwa languages seem to have (superficially) similar light nouns. Akyem, from the Akan group, has a a nominal element *asɛm*, which is variously translated as 'matter, affair, report':

(51) asém bεn nà ɔ-ká-è ε what Foc he say-Past PART"What report was it that he gave?" (Boadi 2005, 62)

- (52) asém (no) áà ε si-i há o yε hu "(the) matter which occured here was frightening." (Boadi 2005, 152)
- (53) Kofi bisa-a Ama asεmKofi ask-PST Ama issue"Kofi asked Ama a question."(Afranaph database ID#15565)

## 6 Complementizer stacking

The complementizers si and gi do not co-occur without an accompanying  $l\varepsilon\varepsilon$ :

- (54) a. mà-plaŋu lε-auà **sì l**εε **gì** méri a-kla ke-plekpà-ε 1sg.pfv-put.face pron-top si lε gi Mary 3sg.pfv-read cl-book-def "I remembered that Mary read the book."
  - b. \* ma-plaŋu lε-aυa si gi mɛri a-kla ke-plekpa(-ε) 1sg.pfv-put.face pron-top si gi Mary 3sg.pfv-read cl-book-def Intended: I remembered that Mary stole the book."

Consider the *a*-initial form of *gi*, which also introduces embedded clauses:

- (55) mà-plaṇu l-avà tsoṇ a-gì méri a-kla ke-plekpà-ĉ 1sg.pfv-put.face it-top suddenly A-GI Mary 3sg.pfv-read CL-book-CL.DET "I suddenly remembered that Mary read the book."
  - We noted earlier that si  $l\varepsilon$  is almost always pronounced with a long vowel (i.e. as si  $l\varepsilon\varepsilon$ ). One way to make sense of this is to assume that this is composed of si +  $l\varepsilon$  + a + gi.

Complementizer stacking is also found in conditional clauses:

(56) xé (gì) e-gbo-là sì lε-kpὲ ε̂, àyapè ŏ-tá-vù la.

XE GI CL.PL-chair-DEF SI CNC-fall CL.DET, Ayape 3SG.NEG-FUT-catch CNC.PL

"If the chairs fall, Ayape will not catch them."

The inverse order of si and  $l\varepsilon$  yields a purpose/reason interpretation:

(57) mà-dò srasε lε sε sì mè-pè 1sG.PFV-dɔ sleep Lε? sɪ 1sG.PFV-tired "I slept because I was tired."

It is also possible (and common) for multiple instances of the *si* element to occur:

- (58) a. àyapè e-bù **sì** ke-plekpă **sì** mérì e-zuru ki-vo-è
  Ayape 3sg.pfv-think si cl-book:foc si Mary 3sg.pfv-steal cl-yesterday-def
  "Ayape thought Mary stole a book yesterday (people say)."
  - b. àyapè e-bù **sì** egé **sì** mérì e-zurû? Ayape 3sg.pfv-think sı what sı Mary 3sg.pfv-steal "What does Ayape think (people say) Mary stole?"

At least superficially strongly reminiscent of so-called 'CP-recursion', as discussed by McCloskey (2006), who analyzes English clauses where multiple complementizers occur:

- (59) a. I don't think that he should contend **that** just because he makes a promise **that** it becomes a responsibility of the United States. (McCloskey 2006, 69d)
  - b. It is useful to know **that** once you have mastered the chosen dialect **that** you will be able to pick up a news paper and read it.(McCloskey 2006, 69e)

The simultaneous presence of multiple COMP elements (occurring in particular orders, corresponding to particular interpretations) suggests that Avatime will be useful in elucidating potential cross-linguistic variation in the structure of the left periphery (see Rizzi (1997); Aboh (2004); Bassong (2010); Torrence (2013).

## 7 Preliminary results and conclusions

### In this talk, we have provided:

- an overview of matrix and embedded complementizers at the left and right edges of the clause.
- Matrix: Q-particles, emphasis particle, and the evidential complementizer.
- Embedded: si (verbal), gi,  $l\varepsilon$  (nominal ending in clausal determiners i and  $\varepsilon$ )
- discussion of the morpho-syntactic and semantic properties of light nouns.
- a preliminary description of stacked complementizers, their distribution, and some of the morphosyntactic and semantic properties associated with them.

#### Future research agenda (for us):

- determine proper decomposition of complementizers.
- determine which verbs and complementizers are compatible with which (other) complementizers.
- syntax and semantics of the light nouns.

#### **Avatime and Afranaph:**

- Avatime is an interesting language to investigate issues related to the syntactic and semantic relationship between particular COMPs and the predicates that select for them (e.g., indirect questions can involve activation of the left and right clausal edges).
- Avatime may provide insight into the question of how the internal structure of the COMP domain affects the presuppositional or evidential nature of a clause (e.g., matrix *si* and embedded *si* vs. embedded *gi*/COMP stacking).

- The investigation of light nouns in Avatime provides an empirical contribution to the study of clausal complementation and raises a number of theoretical issues in the syntax and semantics of clausal complementation.
- Presence of verbal and nominal complementizers and left peripheral nominals may provide insight into long-standing issues in complementation (Baunaz and Lander (2018); Arsenijević (2009).

#### Mlewa lixwe!

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