Chapter 4

A note on *wh*-questions in Avatime

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This paper examines *wh*-question constructions in Avatime, an endangered Ghana Togo Mountain language. We focus on the different wh-strategies and island constraints and discuss these in relation to left peripheral elements such as question particles and complementizers.

1 Introduction

In this paper, we present some initial results of an investigation into interrogative constructions in Avatime. We focus on description of the morpho-syntax of *wh*-question formation.

1.1 Background

Avatime is an endangered Kwa language spoken in several towns and villages in the Volta Region of Ghana. More precisely, most Avatime speakers live in an area to the east of Lake Volta approximately 30 miles to the north of Ho, the regional capital. It is also known as *Siya* and *Sideme*. There are approximately 24,000 native speakers (Ethnologue).

Avatime is classified as a Ghana-Togo Mountain language (also referred to as "Central Togo" or "Togo Remnant" languages). The group consists of 15 languages, all of which are spoken in the Volta Region of Ghana and neighboring regions of Togo and Benin.[1] Within the Ghana-Togo Mountain language group, Avatime belongs to the Ka-Togo branch.

[1]Whether the Ghana-Togo Mountain languages constitute a true genetic unit has been debated, with some suggesting instead that they are a geographical, socio- cultural or typological group (Ameka 2017).

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Avatime is a tone language, with three or four level tones (Ford 1971; Dakubu & Ford 1988; Schuh 1995; Defina 2009; van Putten 2014). (In this paper, we assume three tone levels.[2])

Avatime has basic SVO word order:

(1) Àyapè a-klà ke-plekpà
Ayape 3SG.PERF-read CL-book
'Ayape read the book.'[3]

Like other GTM languages, Avatime has an active noun class system. In (1), the singular direct object, *ke-plekpà* 'book' has a noun class prefix, *ke-*. Overall, Avatime has 13 noun classes, with the difference between singular and plural typically indicated by a change in the noun class prefix (e.g., *ɔ́/bá-dzɛ* 'woman/women', *ɔ̀/ɪ̀-ha* 'pig/pigs, *ki/bi-kù* 'yam/yams', *ku/bè-dè* 'road/roads).

1.2 Interrogatives in Avatime

Yes/no questions in Avatime can be marked by the presence of a clause-final question particle *na* (Ford 1971):

(2) a. ɛɛ́-dɔ srasɛ̀
3SG.PROG-sleep sleep *Declarative*
'He is sleeping.'

b. ɛɛ́-dɔ srasɛ̀ **(na)**?
3SG.PROG-sleep sleep Q *Yes/No*
'Is he sleeping?'

When the overt question particle is absent, a yes/no question may be indicated by the presence of a right-edge falling tone, a characteristic of a number of West African languages (Downing & Rialland 2017).[4] It is not clear what semantic or

[2]The three levels correspond to Low, High, and Extra High from Ford (1971) and van Putten (2014). Unmarked vowels have high tone. Low tone is indicated by a grave accent and Extra High tone is indicated by an acute accent.

[3]The orthography used here is based on that used in the Avatime New Testament (Ghana Institute of Linguistics, Literacy, and Bible Translation 2017).

[4]Thanks to Laura Downing (p.c.) for pointing this out. However, van Putten (2014: 62–63) notes, "Polar questions without final *na* can sometimes be distinguished from statements by intonation as they may end with a high boundary tone. This is only audible when the sentence ends in a low tone and it is optional; there are also cases of polar questions that cannot be distinguished from statements based on intonation." We have found that there are also cases where there is a high right boundary tone that is realized on the final syllable of the constituent that immediately precedes *na*. We leave precise characterization of the tone and intonation of polar questions for future research.

pragmatic differences correlate with questions that have the question particle versus those that lack it. Like yes/no questions, the question particle may optionally appear on the right edge of a *wh*-question:

(3) a. wò-zulu ke-plekpà
2SG.PERF-steal CL-book *Declarative*
'You stole the book.'

b. egé wò-zulu (**na**)?
what 2SG.PERF-steal Q *wh-Question*
'What did you steal?'

Just as in yes/no questions, if the question particle is absent, there is a falling tone on *ege* 'what' or whatever element occurs on right edge of the clause. (See the examples in (4–6).) In addition, the semantic or pragmatic import of the optional question particle is not clear. In elicitation, the particle can be used with echo questions. However, the particle does not, by itself, indicate an echo question given that speakers use it in out-of-the-blue contexts and it can be absent in echo questions. Anticipating the following section, Avatime *wh*-expressions are given in Table 4.1 below.

Table 4.1: Avatime *wh*-expressions

wh-expressions	
nyà(ŋ)we, amwe	'who'
ègè	'what'
wolì	'which'
nɪfɔ̀	'where'
lìpolì, lípoè wólì	'when'
kɪtɛ	'how'
ege loso, kɪtɛ loso	'why'
kítɛ́ tú(wá)sè	'how much, how many'

Morphologically, *wh*-items appear to be somewhat eclectic. There does not seem to be a truly monomorphemic word corresponding to *when* if *lipoli* 'when' is really a contracted or shortened form of *lipoe woli* 'when (lit. 'which time'). Similarly, the two expressions for *why* are complex, with one form corresponding to 'what reason' (*ege loso* 'why') and the other corresponding to 'how reason' (*kɪtɛ loso* 'why'). In addition, the word for *where* seems to be built from the general

preposition ("P") *ní* (*nɪfɔ* 'where').[5] We also note that we have been unable to detect any distributional difference between the two forms for *who*. While an individual speaker may have a preference for using one of the forms, all of our consultants accepted all of the forms.

2 Main clause *wh*-questions

Avatime main clause *wh*-questions allow for the *wh*-item to appear in the left periphery of the clause and for *wh* in-situ (with or without question particle):

(4) a. **egé** wɔ-ŋà (na)
what 2SG.PERF-eat Q *what* Ex-situ
'What did you eat?'

b. wɔ-ŋà **egè** (na)
2SG.PERF-eat what Q *what* In-situ
'What did you eat?'

(5) a. **lìpolí** Àyapɛ̀ a-yɔ ní kisà (na)
when Ayape 3SG.PERF-wake.up P ? Q *when* Ex-situ
'When did Ayape wake up?'

b. Àyapɛ̀ a-yɔ ní kisà **lìpolì** (na)
ayape 3SG.PERF-wake.up P ? when Q *when* In-situ
'When did Ayape wake up?'

(6) a. **tuàsɛ̀** **ki-mimí** ónyime e-dzi (na)
how.much rice man-DEF 3SG.PERF-buy Q *how much* Ex-situ
'How much rice did the man buy?'[6]

b. ónyime e-dzi **tuàsɛ̀** **kimimì** (na)
man-DEF 3SG.PERF-buy how.much rice Q *how much* In-situ
'How much rice did the man buy?'

Avatime does not seem to have a segmental focus marker (Ford 1971; van Putten 2014). Instead, a constituent (whether a *wh*-expression or not) focused to the left edge of the clause has an extra high tone on its right edge, as can be seen in the examples above.

While all of the other *wh*-expressions can appear in-situ, *why* patterns differently. *Why* can't appear in-situ:

[5] If this is on the right track, we still do not know what the *fɔ* corresponds to.

[6] Note that in this example the high tone that indicates left peripheral focus is realized on the final vowel of *ki-mimi* 'rice', the rightmost word in the fronted constituent.

(7) a. ege losó wo-tsyi máŋgo-e (na)
what reason 2SG.PERF-peel mango-DEF Q *why* Ex-situ
'Why did you peel the mango?'

b. * wo-tsyi máŋgo-e **ege losò** (na)
2SG.PERF-peel mango-DEF what reason Q **why* In-situ
Intended: 'Why did you peel the mango?'

Similar asymmetries involving *why* have been documented in other Kwa languages (Krachi: Torrence & Kandybowicz 2015), distantly related Niger-Congo languages (Bakweri: Marlo & Odden 2007; Zulu: Buell 2011; Lubukusu: Wasike 2007) and in languages unrelated to Avatime (Italian: Rizzi 2001; Romanian: Shlonsky & Soare 2011; New Testament Greek: Kirk 2012; Persian: Karimi 2008; English: Hornstein 1995; Korean & Japanese: Ko 2005; Chinese: Lin 1992).

The idea that *why* is syntactically different from the other *wh*-items is supported by the interaction of predicate clefting (and other left peripheral foci) and *why* questions. (8b) is an example of a predicate cleft, which involves a nominalized copy of the verb in the left periphery of the clause. (8c) shows that a predicate cleft is compatible with a *wh*-question, but only when the *wh*-item does not occur on the left edge. (The curly bracketed strings indicate different places where the *wh*-item might appear.) (8d) shows that an adjunct *wh*-item like *nɪfɔ* 'where' patterns identically to an argument:

(8) a. be-dzi ke-plekpà kè-dzya mɛ̀
3PL.PERF-buy CL-book CL-market P
'They bought a book at the market.'

b. [**ki-dzí**] be-**dzi** ke-plekpà kè-dzya mɛ̀
NOM-buy 3PL.PERF-buy CL-book CL-market P
'They BOUGHT a book at the market (as opposed to, say, selling one).'

c. **{*ege} [ki-dzi] {*ege}** be-dzi **{✓ege}** kè-dzya mɛ̀
what NOM-buy what 3PL.PERF-buy what CL-market P
'What did they BUY at the market (as opposed to sell there)?'

d. **{*nɪfɔ} [ki-dzì] {*nɪfɔ}** be-dzi ke-plekpla **{✓nɪfɔ}**
where NOM-buy where 3PL.PERF-buy CL-book where
'Where did they BUY the book (as opposed to sell it)?'

This pattern can be made sense of if the clefted predicate and the *wh*-items compete for the same left peripheral focus position. Surprisingly, left peripheral *why* is compatible with a predicate cleft:

(9) **{ege losó}** [ki-dzi] **{*ege losó}** be-dzi ke-plekpà kè-dzia
what reason NOM-buy what reason 3PL.PERF-buy CL-book CL-market
mɛ̀
P
'Why did they BUY a book at the market (as opposed to, say, selling one)?'

First, these data suggest that *why* occupies a distinct position in the left periphery from other expressions. In addition, the data in (9) show that *why* must occur to the left of the clefted predicate, which suggests that *why* occupies a position higher than the left peripheral focus position.

3 Embedded *wh*-questions

All *wh*-expressions can appear in the left periphery of an embedded question or in situ (except for *why*), with or without a right edge question particle:

(10) a. me-ʊí Kòfi sì **{egé}** be-dzi **{ege}** (na)
1SG.PERF-ask kofi COMP what 3PL.PERF-buy what Q
'I asked Kofi what they bought.'

b. me-ʊí Kòfi sì **{nìfɔ́}** be-dzi lì-mwɛ-nɛ̀ **{nìfɔ́}**
1SG.PERF-ask kofi COMP where 3PL.PERF-buy CL-orange-DET where
(na)
Q
'I asked Kofi where they bought the oranges.'

c. me-ʊí Kòfi sì **{kɪtɛ́}** be-dzi lì-mwɛ-nɛ̀ **{kɪtɛ́}** (na)
1SG.PERF-ask kofi COMP how 3PL.PERF-buy CL-orange-DEF how Q
'I asked Kofi how they bought the oranges.'

As with matrix questions, it is unclear how the presence or absence of the question particle affects the interpretation of embedded questions. We note, impressionistically, that the question particle is offered much more frequently in elicitation with embedded questions than matrix questions.[7]

[7] Avatime also allows for embedded yes/no questions that look like their matrix clause counterparts. A reviewer points out that many Kwa languages lack true embedded *wh*-questions and employ a relative clause-like structure instead (see, for example, Torrence & Kandybowicz 2015 on Krachi, a North Guang (Kwa) language of Ghana). Interestingly, Ikpana, a member of the Na-Togo branch within the GTM group, also has true embedded *wh*-questions and a relative clause-like construction, as reported in Kandybowicz et al. (2020). At this point, we can say that true embedded *wh*-questions are found in at least one language in both branches of the Ghana-Togo Mountain languages.

The embedded questions in (10) are all introduced by the complementizer *sɪ*, which is homophonous with a verb meaning 'say'. The *sɪ* complementizer also introduces embedded propositions:

(11) Àyapɛ̀ e-bù sì Mɛ́rì e-dzi lì-mwɛ-nɛ̀
ayape 3SG.PERF-think COMP mary 3SG.PERF-buy CL-orange-DEF
'Ayape thinks that Mary bought oranges.'

It is also possible for embedded *wh*-questions to exhibit "double complementizers":

(12) a. me-ʊí Kòfi **sì** egé **sì** Àyapɛ e-ye
1SG.PERF-ask Kofi COMP what COMP ayape 3SG.PERF-kill
'I asked Kofi what Ayape killed.'[8]

b. me-ʊí Kòfi **sì** nìfɔ́ **sì** be-dzi ɔ-kɔ̀-lɔ
1SG.PERF-ask Kofi COMP where COMP 3PL.PERF-buy CL-chicken-DEF
'I asked Kofi where they bought the chicken.'

In (12), the *wh*-expression is sandwiched between two instances of the complementizer. This is immediately reminiscent of the so-called "CP recursion" structures found in colloquial English varieties. McCloskey (2006) analyzes English clauses where multiple complementizers appear:

(13) 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.[9]

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.

In Avatime, just as in English, it is unclear if there is a semantic or pragmatic difference between the "simple" and "recursive" CP structures. Some speakers do report that the multiple COMP construction adds a flavor of emphasis, but this response is inconsistent. Thus, we leave it here as an open question.

4 *Wh*-items from embedded clauses

Wh-items associated with argument/adjunct positions in embedded clauses that take matrix scope exhibit three patterns. A *wh*-item from an embedded clause can exhibit full movement and surface on the left edge of the matrix clause (14b).

[8] To our knowledge, the existence of cases like (12a) is first noted in van Putten (2014: 113).
[9] These are adapted from McCloskey (2006: (69d) and (69e)).

(14c) shows that Avatime also allows for partial *wh*-movement, in which the *wh*-item surfaces on the left edge of the embedded clause. Finally, the *wh*-item in (14d) can surface in-situ in its base position in the embedded clause.

(14) *Direct object*

a. Kòfi e-bù sì Àyapɛ̀ e-ye ɔ-kɔ̀-lɔ kí
Kofi 3SG.PRES-think COMP Ayape 3SG.PERF-kill CL-chicken-DEF P
Kwamè
Kwame
'Kofi thinks that Ayape killed a chicken for Kwame'

b. **egé** Kòfi e-bù sì Àyapɛ e-ye kí Kwamè
what Kofi 3SG.PRES-think COMP Ayape 3SG.PERF-kill P Kwame
'What does Kofi think that Ayape killed for Kwame?'

c. Kòfi e-bù sì **egé** Àyapɛ e-ye kí Kwamè
kofi 3SG.PRES-think COMP what Ayape 3SG.PERF-kill P Kwame
'What does Kofi think that Ayape killed for Kwame?'

d. Kòfi e-bù sì Àyapɛ e-ye **egé** kí Kwamè
kofi 3SG.PRES-think COMP Ayape 3SG.PERF-kill what P Kwame
'What does Kofi think that Ayape killed for Kwame?'

(15) shows a similar pattern for subjects. The embedded *wh*-subject can surface in its scope position (15a) or in the embedded clause (15b). Because a partially moved *wh*-item surfaces to the right of the complementizer, it is not clear whether (15b) is a case of partial *wh*-movement or an in-situ *wh*-item. Note too that (15a) shows that there is no *that-t* effect (as pointed out by a reviewer):

(15) *Subject*

a. **nyàwɛ́** Kòfi e-bù sì e-ye ɔ-kɔ̀-lɔ kí
who Kofi 3SG.PRES-think COMP 3SG.PERF-kill CL-chicken-DEF P
Kwamè
Kwame
'Who does Kofi think killed the chicken for Kwame?'

b. Kòfi e-bù sì nyàwɛ́ e-ye ɔ-kɔ̀-lɔ kí
Kofi 3SG.PRES-think COMP who 3SG.PERF-kill CL-chicken-DEF P
Kwamè
Kwame
'Who does Kofi think killed the chicken for Kwame?'

The data in (16) show that locative adjuncts pattern like arguments. (16b) shows full movement of the adjunct, while (16c) is an example of partial movement. In (16d), the *wh*-item occurs in its postverbal base position.

(16) a. Kofì e-bù sì Àyapɛ̀ e-ye ɔ-kɔ̀-lɔ̀ kí
Kofi 3SG.PRES-think COMP Ayape 3SG.PERF-kill CL-chicken-DEF P
Kwamè ní kɛ̀-dzia mɛ̀
Kwame LOC CL-market P
'Kofi thinks that Ayape killed a chicken for Kwame at the market'

b. **nɪfɔ́** Kofì e-bù sì Àyapɛ̀ e-ye ɔ-kɔ̀-lɔ̀
where Kofi 3SG.PRES-think COMP Ayape 3SG.PERF-kill CL-chicken-DEF
kí Kwamè
P Kwame
'Where does Kofi think that Ayape killed a chicken for Kwame?'

c. Kofì e-bù sì **nɪfɔ́** Àyapɛ̀ e-ye ɔ-kɔ̀-lɔ̀
Kofi 3SG.PRES-think COMP where Ayape 3SG.PERF-kill CL-chicken-DEF
kí Kwamè
P Kwame
'Where does Kofi think that Ayape killed a chicken for Kwame?'

d. Kofì e-bù sì Àyapɛ̀ e-ye ɔ-kɔ̀-lɔ̀ kí
Kofi 3SG.PRES-think COMP Ayape 3SG.PERF-kill CL-chicken-DEF P
Kwamè (ní) **nɪfɔ̀**
Kwame LOC where
'Where does Kofi think that Ayape killed a chicken for Kwame?'

Note that in the non-interrogative (16a) the locative PP has both a prepositional element, *ní* 'LOC' and a postposition *mɛ* (see Ford 1971). Neither of these occurs with a moved *wh*-item (16b, 16c), although the preposition is optional when the locative *wh* is in-situ.

5 The relative type of *wh*-interrogation

The cases examined up to this point have all been ones in which all of the clauses involved have the form of ordinary root clauses. A second class of *wh*-question strategies involves structures akin to relative clauses (RCs). To see this, we first consider headed relative clauses:

(17) a. ma-mɔ̀ kà-druí kà(-kɔ)-lɔ̀ **gì/*sì** wɔ-kpɔ́ *(è)
1SG.PERF-see CL-dog CL-DEM-DET REL/*COMP 2SG.PERF-praise CDET
'I saw the dog that you praised.'

b. ma-mɔ̀ kà-druí kà-tɔ **gì/*sì** wɔ-kpɔ́ *(è)
1SG.PERF-see CL-dog CL-DET REL/*COMP 2SG.PERF-praise CDET
'I saw a dog that you praised'

c. ma-mɔ̀ kù-druí kù-tɔ **gì/*sì** wɔ-kpɔ́ *(è)
1SG.PERF-see CL.PL-dog CL.PL-DET REL/*COMP 2SG.PERF-praise CDET
'I saw some dogs that you praised'

Moving from left to right, in Avatime RCs, the left edge of RC (underlined in (17) has a noun class agreement marker, potentially followed by a demonstrative element (if the head is definite), followed by a determiner. The underlined string in the definite headed RC in (18) indeed occurs independently as a demonstrative:

(18) kpɔ̀ ka-druí **kà-kɔ-lɔ̂**
praise.IMPER CL-dog CL-DEM-DEF
'Praise that dog!'

The left-edge class markers and determiners are followed by the relative clause complementizer, *gi* (in bold). This complementizer also occurs on the left edge of a subset of temporal and conditional clauses. As indicated in (17) too, the *sɪ* complementizer, which introduces embedded propositions and questions, cannot be used to introduce a relative clause. Verbs in Avatime relative clauses do not carry any special morphology and inside of the relative clause, the normal SVO word order is observed.

The right edge of RCs is indicated by an obligatory *clausal determiner*, CDET. As van Putten (2014) notes, the clausal determiner assimilates to height and ATR value of a preceding vowel.[10] The clausal determiner is homophonous with one of the definite determiners, for example, the vowel lengthening that distinguishes some definite from indefinite nouns:

(19) a. ó-nyime '(a) man'
b. ó-nyime-**è** 'the man'

While it has the form of a definite determiner, the clausal determiner has no obvious relationship to specificity/definiteness, as it occurs with both definite and indefinite headed RCs. Overall, headed RCs are structured as below:

[10]While van Putten notes that the clausal determiner is *often* used, our consultants consistently used it in headed relative clauses.

(20) N CL-(DEM)-DET [$_{TP}$ SVO] CDET

There are two types of relative interrogative structures. The first involves only the relative marker *gi*:[11]

(21) a. **nyàwɛ́ gì** a-dà lì-mwɛ-nɛ̀ (*ɛ)
who REL 2SG.PERF-sell CL-oranges-DEF CDET
'Who sold the oranges?'[12]

b. **nɪ̀fɔ́ gì** be-dzì lì-mwɛ-nɛ̀ (*ɛ)
where REL 3PL.PERF-buy CL-oranges-DEF CDET
'Where did they buy the oranges?'

c. **egé gì** be-ye (*e)
what REL 3PL.PERF-kill CDET
'What did they kill?'

As indicated, unlike ordinary headed RCs, the clause-final determiner is ungrammatical in the *wh*-question construction.

The RC type of *wh*-interrogative does not allow for *wh* in-situ:

(22) (*gì) wo-dzì lì-mwɛ-nɛ̀ **nɪfɔ̀**
REL 2SG.PERF-buy CL-oranges-DEF where
'Where did you buy the oranges?'

It is important to note that there is no inherent problem with *gì* occurring by itself on the left edge of a clause. This configuration can be found in some temporal clauses, with the right edge clausal determiner:

(23) mɛ-tá-dɔ srasɛ̀ [gì Kòfi e-dzì ì]
1SG-FUT-sleep sleep REL Kofi 3SG-arrive CDET
'I will sleep when Kofi arrives.'[13]

[11] At this point, we do not know whether there is an interpretive or pragmatic difference between the relative types of *wh*-question and the non-relative types discussed earlier. We leave this as a topic for future research.

[12] There are other contexts where *gi* occurs without the final determiner:

be-bù sì gì wo-dzì ke-plekpà
3PL-think.PRES COMP REL 2SG-buy.PERF CL-book
'They think that you bought a book.'

[13] Some temporal/conditional clauses may also involve the relative complementizer and *whether*:

The second type of RC-related *wh*-interrogative clause involves the RC complementizer and the noun class agreeing markers. In (24a), the left-edge *wh*-expression is immediately followed by the string *class marker* + (*demonstrative*) + *determiner*. This complex is followed by the relative marker *gi*. As before, the clausal determiner is not permitted. (24b) shows that the *wh*-expression cannot be in-situ in this construction. (24c–24e) show this type of relative clause *wh*-construction for other *wh*-expressions in matrix and from embedded clauses:

(24) a. **egé** ka(-kɔ)-lɔ̀ gì be-dzi (*ì)
what CL-DEM-DET REL 3PL.PERF-buy CDET
'What did they buy?'

b. *ka(-kɔ)-lɔ̀ gì be-dzi (*ì) **egè**
CL-DEM-DET REL 3PL.PERF-buy CDET what
'What did they buy?'

c. **bi-kù wòlí bɛ-(wɔ)-lɔ̀ gì** be-dzi (*ì)
CL.PL-yam which CL-DEM-DET REL 3PL.PERF-buy CDET
'Which yams did they buy?'

d. **nɪfɔ́ lɛ́-(wɔ)-lɔ̀ gì** be-dzi lì-mwɛ-nɛ̀ (*ɛ̀)
where CL-DEM-DET REL 3PL.PERF-buy CL.PL-oranges-DEF CDET
'Where did they buy the oranges?'

e. **bi-kù wòlí bɛ-lɔ̀ gì** be-bù sì be-dzi
CL.PL-yam which CL-DET REL 3PL.PRES-think COMP 3PL.PERF-buy.PERF (*ì)
CDET
'Which yams do they think that they bought?'

It is also possible to form complex chains with multiple relative markers. (25a) gives the base case, with a *wh*-phrase on the left edge. (25b) shows the relative *wh*-construction. In (25c), the higher clause looks the same as in (25b), but the left edge of the embedded clause is marked by the presence of noun-class agreeing pronominal (*ka*) and a *class marker* + *determiner* string, which looks very similar to what occurs on the left edge of a headed relative clause. In (25d), the matrix

maá-dɔ srasɛ̀ [xé gì Kofi ɔ-dzì ì]
1SG.FUT-sleep sleep whether REL kofi 3SG-arrive CDET
'I will sleep when Kofi arrives.'

It is not clear whether the clausal determiner always appears in conditional or temporal clauses.

clause has none of the left edge material found in relative clauses, but embedded clause has the pronominal *ka* and the *class marker + determiner* string found in (25c).

(25) a. **ka-druì wòlí** be-bù sì Àyapɛ a-kpɔ̀ (*ɛ)
CL-dog which 3PL.PRES-think COMP Ayape 3SG.PERF-praise CDET
'Which dog do they think that Ayape praised?'

b. **ka-druì wòlí ka-lɔ̀ gì** be-bù sì Àyapɛ
CL-dog which CL-DET REL 3PL.PRES-think COMP Ayape
a-kpɔ̀ (*ɛ)
3SG.PERF-praise CDET
'Which dog do they think that Ayape praised?'

c. **ka-druì wòlí ka-lɔ̀ gì** be-bù sì **kaá-ka-lɔ̀** %(gì)
CL-dog which CL-DET REL 3PL.PRES-think COMP CL-CL-DET REL
Àyapɛ a-kpɔ̀ (*ɛ)
Ayape 3SG.PERF-praise CDET
'Which dog do they think that Ayape praised?'[14]

d. **ka-druì wòlí** be-bù sì **kaá-ka-lɔ̀** %(gì) Àyapɛ̀
CL-dog which 3PL.PRES-think COMP CL-CL-DET REL Ayape
a-kpɔ̀ (*ɛ)
3SG.PERF-praise CDET
'Which dog do they think that Ayape praised?'

Note that the class-agreeing element *ka* in (25b–25d) can also appear in simple *wh*-questions, but only in pre-subject position:

(26) a. *ka-druì wòlí wɔ-mɔ̀ **ká**
CL-dog which 2SG.PERF-see CL
'Which dog did you see?'

b. ka-druì wòlí **ká** wɔ-mɔ̀
CL-dog which CL 2SG.PERF-see
'Which dog did you see?'

[14] The "%" used here and in (25d) indicates that some speakers consistently judged the presence of the relative marker as grammatical, while other speakers consistently rejected sentences where the relative marker was present in this position.

6 Islands

Turning to islands (Ross 1967), there cannot be an island boundary between the surface position of a *wh*-item and its base position. We first consider the complex noun phrase constraint (CNPC), cases like relative clauses, such as (27a). A case like (27b) represents an attempt to move the *wh*-item out of the RC, yielding ungrammaticality. Note too that the presence of a resumptive pronoun (*wa*) does not alleviate the ungrammaticality:

(27) a. bɛ-kpɔ́ ó-nyime lɛ-kɔ-lɔ̀ [gì a-dà ki-mimì-ɛ ɛ]
3PL.PERF-praise CL-man CL-?-DET REL 3SG.PERF-sell CL-rice-DEF CDET
'They praised the man who sold the rice.'

b. *__egé__ bɛ-kpɔ́ ó-nyime lɛ-kɔ-lɔ̀ [gì a-dà ∅/__wa__
what 3PL.PERF-praise CL-man CL-?-DET REL 3SG.PERF-sell ∅/CL.PRON
e]
CDET

However, if the *wh*-item is left inside of the island, the result is grammatical:

(28) bɛ-kpɔ́ ó-nyime lɛ-kɔ-lɔ̀ [gì a-dà __ege__ e]
3PL.PERF-praise CL-man CL-?-DET REL 3SG.PERF-sell what CDET
'What thing is such that they praised the man who sold it?'

A similar pattern holds for adjunct clauses. In (29a), the (bracketed) *before* clause has two elements, *xɛ* 'whether' and *able* 'before', on the left edge. The ungrammatical (29b) results from attempting to move the *wh*-item out of the adjunct island. Note that the presence of a resumptive pronoun, *yè* 'CL.1SG.PRON' or a gap has no effect on the ungrammaticality. (29c) shows that if the *wh*-item is left inside of the island, the result is fine.

(29) a. be-dzì [xɛ́ áblé Àyapɛ̀ a-kpɔ́ Kòfi]
3PL.PERF-arrive whether before Ayape 3SG.PERF-praise Kofi
'They arrived before Ayape praised Kofi.'

b. *__nyàwé__ be-dzì [xɛ́ áblé Àyapɛ̀ a-kpɔ́
who 3PL.PERF-arrive whether before Ayape 3SG.PERF-praise
yɛ/__]
CL1.SG.PRON

c. be-dzì [xɛ́ áblé Àyapɛ̀ a-kpɔ́ nyàwè]
3SG.PERF-arrive whether before Ayape 3SG.PERF-praise who
'They arrived before Ayape praised who?'

We next look at coordinate structures like (30a), where objects are conjoined. (30b), (30c), both ungrammatical attempts to move a single conjunct out, immediately suggest that the coordinate structure constraint is active in Avatime. These examples also show that the presence of a class-agreeing resumptive pronoun or a gap both result in ungrammaticality:

(30) a. bɛ-dà [ke-plekpà nì ɔ̀-mwɛ-nɔ̀]
3PL.PERF-sell CL-book and CL-orange-DEF
'They sold a book and an orange.'

b. ***èɡé** bɛ-dà [ke-plekpà nì lɔ/∅]
what 3PL.PERF-sell CL-book and CL2.SG.PRON
'What did they sell the book and?'[15]

c. ***èɡé** bɛ-dà [ka/∅ nì ɔ̀-mwɛ-nɔ̀]
what 3PL.PERF-sell CL6.SG.PRON and CL-orange-DEF
'What did they sell and the orange?'[16]

As with the other island cases, if the *wh*-item is in-situ in either conjunct, the result is grammatical:

(31) a. bɛ-dà [ke-plekpà nì **ɛ̀ɡè**]
3PL.PERF-sell CL-book and what
'They sold a book and what?'

b. bɛ-dà [**èɡe** nì ɔ̀-mwɛ-nɔ̀]
3PL.PERF-sell what and CL-orange-DEF
'They sold what and an orange?'

The cases that we have looked at so far, RCs, adjuncts, and conjoined structures are known to be strong islands. The second case covered by the CNPC is CP complements to nouns. While degraded in English, argument extractions from CP complements to nouns is permitted ('$^{?/??}$What did you hear the rumor that John stole at the store?'). On the other hand, adjunct extraction is ungrammatical ('*Where$_k$ did you hear the rumor that John stole the book t_k?', in which, informally, the 'where' is construed in the embedded clause and the request is for the location of the stealing event.) In Avatime, in contrast, apparent CP complements to nouns are transparent for extraction for both arguments (32b) and

[15]This sentence can only have the meaning 'By using what did they sell the book?' Also, the pronoun *lɔ* is drawn from noun class 2, hence the gloss.

[16]This can only have the meaning 'What did they sell by means of/using an orange?'

at least some adjuncts (32c). However, unlike English, these do not look like relative clauses because there is no relative complementizer (*gi*) or clause-final determiner.

(32) a. me-nú liwɔlɛmɛ̀ sì Àyapɛ a-dà ke-plekpà ní
1SG.PERF-hear rumor COMP Ayape 3SG.PERF-sell CL-book LOC
kɛ̀-dzia mɛ̀
CL-market P
'I heard the rumor that Ayape sold a book at the market.'

b. ègé wo-nú liwɔlɛmɛ̀ sì Àyapɛ a-dà ní
what 2SG.PERF-hear rumor COMP Ayape 3SG.PERF-sell LOC
kɛ̀-dzia mɛ̀
CL-market P
'What did you hear the rumor that Ayape sold at the market?'

c. **nɪfɔ́** wo-nú liwɔlɛmɛ̀ sì Àyapɛ a-dà ke-plekpà
where 2SG.PERF-hear rumor COMP Ayape 3SG.PERF-sell CL-book
'Where did you hear the rumor that Ayape sold a book?'

While cases like (32b) and (32c) are the translational equivalents to the English, it is very likely that they are not direct structural analogues of the English cases. Note that the noun *liwɔlɛmɛ̀* 'rumor' is followed by the *sì* complementizer, which is banned in headed relative clauses. Further, as the examples show, both arguments and adjuncts can be A-bar extracted, which is unlike what is found in English.[17]

7 Summary

In the preceding sections, we have reviewed *wh*-question strategies in Avatime and some of their syntactic and morphological properties. Like other Kwa languages such as Krachi (Torrence & Kandybowicz 2015), Avatime allows for *wh*-movement, *wh*-in-situ, and for partial *wh*-movement. The Avatime data are particularly interesting because they highlight the cross-linguistic question of exactly what semantic or pragmatic differences (if any) are encoded in different morpho-syntactic *wh*-strategies, a topic that must be left to future investigation. Zooming out, we have also shown that, while Avatime does exhibit island sensitivity, the in-situ strategy allows formation of genuine questions from inside islands. This calls for further investigation of the parameters of variation in these effects crosslinguistically.

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