

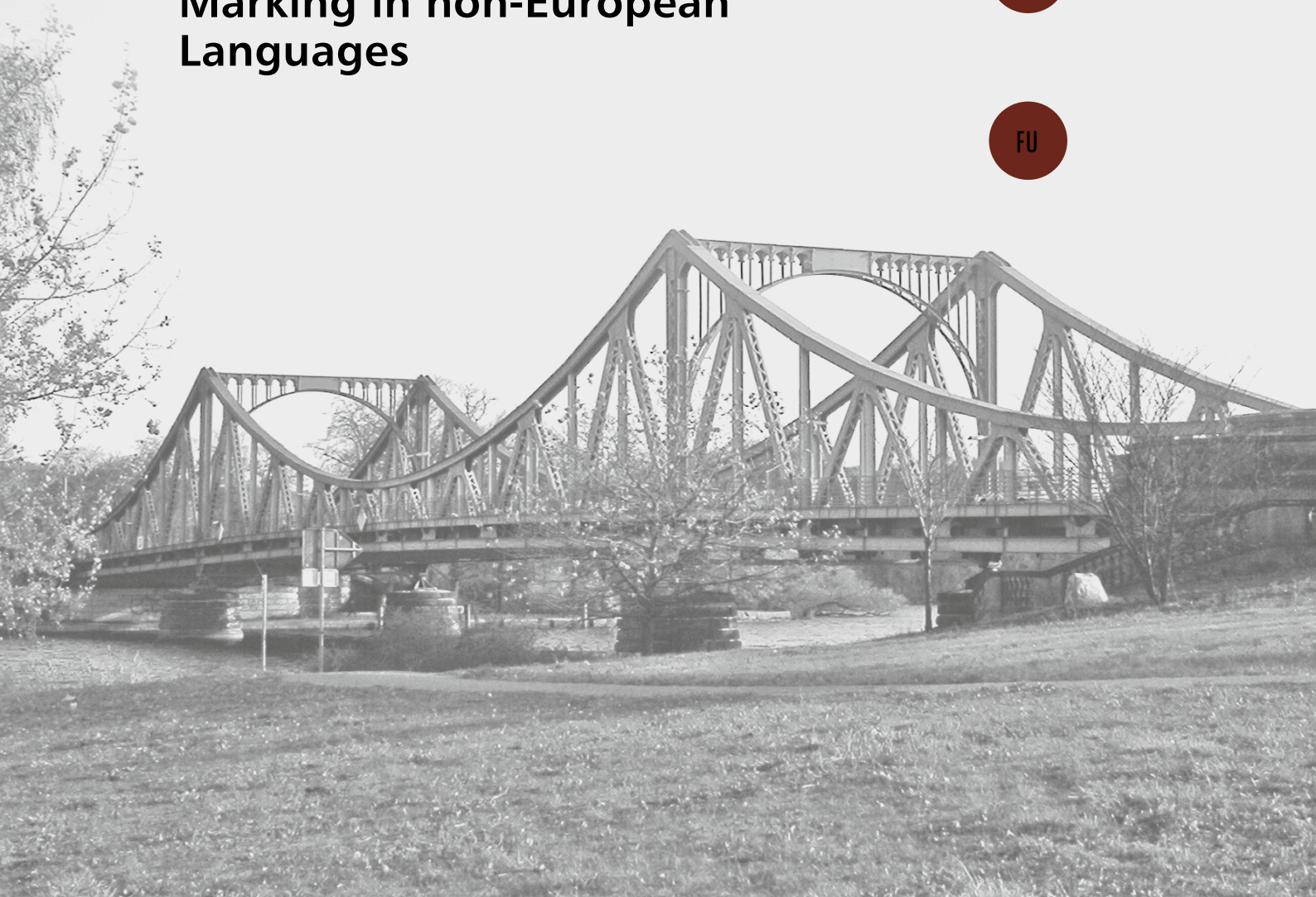
Interdisciplinary Studies on Information Structure Vol. 19

Mood, Exhaustivity & Focus
Marking in non-European
Languages

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Interdisciplinary Studies on Information Structure

**Mood, Exhaustivity & Focus Marking
in non-European Languages**

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Felix Bildhauer; Freie Universität Berlin, SFB 632
Habelschwerdter Allee 45, D-14195 Berlin

Mira Grubic; Universität Potsdam, SFB 632
Am Neuen Palais 10, D-14469 Potsdam

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Preface

This is the 19th — and final — issue of the working paper series Interdisciplinary Studies on Information Structure (ISIS) of the Collaborative Research Center 632. In this issue, we present cross-linguistic work on Mood, Exhaustivity, and Focus Marking, on African languages (Duah, Fominyam, Pfeil et al.) and American languages (Klose, Valle).

Two contributions were made by senior and/or external researchers, namely “Exhaustive Focus Marking in Akan” by Reggie Duah, who worked on this topic as a visiting researcher at the CRC632 in 2014, and “Empirical investigation of focus and exhaustivity in Akan” by Simone Pfeil, Susanne Genzel, and Frank Kügler, which evolved out of Simone Pfeil’s master’s thesis. Both papers investigate focus marking and exhaustivity in Akan (Kwa, Niger-Congo).

Three papers were contributed by former members of the Integrated Graduate School of the CRC. This graduate school was newly introduced in the last phase of the CRC, and also offered short-term grants to external Ph.D. students. Two contributions in this issue are by short-term grant holders: “The Syntax of Focus and Interrogation in Awing: a Descriptive Approach”, by Henry Fominyam, who was a grant holder in the final year of the CRC, and “Modality in Kakataibo”, by Daniel Valle, who was a grant holder in 2013. The third, “Sentence Type and Association with Focus in Aymara” is a contribution by a Ph.D. student at the CRC, Claudius Klose. The paper by Fominyam describes the morpho-syntactic marking of focus and *wh*-questions, as well as other questions, in Awing (Bantu Grassfields). Valle’s contribution discusses modality in Kakataibo (Panoan), showing that Kakataibo encodes the difference between circumstantial and epistemic modality, but not between existential and universal modal force. Finally, Klose’s paper discusses morphological markers in Aymara

(Aymaran) that appear to mark sentence type (declaratives / polar questions / *wh*-questions) and focus, and shows that these particles associate with focus.

Mira Grubic

Felix Bildhauer

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Exhaustive Focus Marking in Akan*

Reginald Akuoko Duah

University of Ghana, Legon

This paper reopens the discussion on focus marking in Akan (Kwa, Niger-Congo) by examining the semantics of the so-called focus marker in the language. It is shown that the so-called focus marker expresses exhaustivity when it occurs in a sentence with narrow focus. The study employs four standard tests for exhaustivity proposed in the literature to examine the semantics of Akan focus constructions (Szabolsci 1981, 1994; É. Kiss 1998; Hartmann and Zimmermann 2007). It is shown that although a focused entity with the so-called focus marker *nà* is interpreted to mean ‘only X and nothing/nobody else,’ this meaning appears to be pragmatic.

Keywords: Akan, focus marker, cleft, exhaustivity, ex situ, in situ, subject/non-subject asymmetry

1 Introduction

This paper presents another look at focus marking in Akan (Kwa, Niger-Congo) by examining the semantics of the so-called focus marker in the language. The study shows that the so-called focus marker (*nà*) always expresses exhaustivity when it occurs in a sentence with narrow focus. This claim is demonstrated by applying various standard tests for exhaustivity to *nà* focus constructions and the

* This research is an outcome of my visit to the SFB 632 at the Universitat Potsdam as a guest researcher. I would like to thank Malte Zimmermann for his immense interest and support in getting this research off to a great start. I am also grateful to Mira Grubic, Agata Renans, Sussane Genzel, Joseph DeVaugh-Geiss and Obadele Kambon for their invaluable comments and suggestions. This paper was presented at the TripleA Workshop held at Tuebingen on June 13, 2014 and the 7th Annual Conference of the Linguistics Association of Ghana (LAG) held at University of Professional Studies, Accra. I thank all the participants of these conferences for their comments, which helped in the final preparation of this article.

results show that this particle only occurs in exhaustive focus environments in the language. The paper is organized into five main sections. In section two, I will provide some relevant background on focus constructions in Akan and show where various previous claims found in the literature on the topic converge and/or diverge. In section three and four, I apply some tests on exhaustivity to substantiate the claim that the so-called focus marker always expresses exhaustivity in sentence with narrow focuss in the language. Finally, in section five I present some conclusions of the study.

2 Background on Focus in Akan

The issue of focus (and topic) in Akan has received considerable attention for over four decades now (for example, Boadi 1974; Saah 1988, 1994; Marfo and Bodomo 2005; Amfo 2010; Ofori 2011; Genzel 2013). It is generally accepted that Akan marks focus morphologically by means of the particle *nà*. For instance, Boadi (1974:9) states that *nà* “may be said to be **the** focus-marker of the language” (emphasis in original). The so-called focus particle *nà* always occurs with a low tone (ˊ) and can be distinguished from the clausal conjunction *nà* and the (past) discourse marker *nà* (see Amfo 2007). This particle occurs at the left edge of a clause after an extracted constituent, as shown in the following examples.¹

¹ Although the discussion on the particle *nà* is taken to be reflective of the various dialects of Akan in general, data for this work come from the Asante dialect. Where examples from other dialects are used, these would be indicated as (Fa.) for Fante and (Ak.) for Akuapem.

(1) Q: Hwán nà ò-dí-î àdùàné nó?²
 who PART 3.SG.SUBJ-eat-COMPL food DET
 ‘Who ate the food?’

A: Kofi_i nà ò_i-dí-ìé
 Kofi PART 3.SG.SUBJ-eat-COMPL
 ‘It was **KOFI** who ate it.’

(2) Q: Hwáń nà Nti bó-ò nó?
 who PART Nti beat-COMPL 3.SG.OBJ
 ‘Who did Nti beat?’

A: Kwaku_i nà Nti bó-ò nó_i
 Kwaku PART Nti beat-COMPL 3.SG.OBJ
 ‘It was **KWAKU** that Nti beat.’

(3) Q: Déń nà Yaw yé-è Akwasi?
 what PART Yaw do-COMPL Akwasi
 ‘What did Yaw do to Akwasi?’

A: Píá nà Yaw pǎá-à Akwasi
 push PART Yaw push-COMPL Akwasi
 ‘It was **PUSHING** that Yaw did to Akwasi.’

Example (1) involves subject focus, (2) involves object focus and (3) involves predicate focus. It is shown in the sentences above that when a constituent that is extracted to the left edge and marked by *nà* is animate, a resumptive pronoun which is coindexed with what has been extracted occurs in its place (1A, 2A). However, if the extracted constituent is inanimate, then no resumptive pronoun

² The following abbreviations are used in this article: 1= first person, 2= second person, 3= third person, ABS= absolute, COMPL= completive, CONT= continuative, DET= determiner, HAB= habitual, INA= inanimate, NEG= negative, OBJ= object, PART= particle, PERF= perfect, PL= plural, Q= question, REL= relative, SG= singular, SUBJ= subject.

occurs. Thus, (4A1) and (5A1) are ungrammatical because of the presence of the pronoun *nó*, which can only be coindexed with animate entities.³

(4) Q: Dɛ́ń nà Kofi dí-ìè?
 what PART Kofi eat-COMPL
 ‘What did Kofi eat?’

A: Èmó nà Kofi dí-ìè
 rice PART Kofi eat-COMPL
 ‘It was **RICE** that Kofi ate.’

A1* Èmó nà Kofi dí-ìè nó
 rice PART Kofi eat-COMPL 3.SG.OBJ
 ‘It was **RICE** that Kofi ate.’

(5) Q: Dàbɛ́ń nà Ama bá-àé?
 day.which PART Ama arrive-COMPL
 ‘When did Ama arrive?’

A: Ènórà nà Ama bá-àé
 yesterday PART Ama come-COMPL
 ‘It was **YESTERDAY** that Ama came.’

³ Korsah (2015) notes, however, that there are instances where the resumptive pronoun in the extraction site does not agree with the extracted element in terms of number or person (ia-b).

- (i) a. Kofi né Ama nà è-bà-à há
 Kofi and Ama PART 3.SUBJ.INA-come-COMPL here
 ‘It was **KOFI** and **AMA** who came here.’
- b. Akosua nà è-kó-ò fíé
 Akosua PART 3.SUBJ.INA-go-COMPL home
 ‘It was **AKOSUA** who went home.’

Thus, Korsah (2015) concludes that in Akan “while resumption is always an available option, EXPL [expletive] insertion and Movement are in complementary distribution for matrix subjects. EXPL [expletive] insertion is a sort of Last Resort strategy to obey Highest Subject Restriction”.

A1* Ènórà nà Ama bá-àé nó
 yesterday PART Ama come-COMPL 3.SG.OBJ
 ‘It was **YESTERDAY** that Ama came.’

The situation is different, however, when a verb is focused and marked by *nà*. As shown in (3A), when a verb is extracted, the verb is duplicated, but only the second copy can receive tense/aspect/mood/polarity (TAMP) marking, while the extracted verb occurs in the infinitive or nominalized) (see Boadi 1974:38).⁴

The particle *nà* also occurs in *wh*-questions (Saah 1988). Consider the examples below.

- (6) a. Kwame ði-ĩ dééń?
 Kwame eat-COMPL what
 ‘What did Kwame eat?’
- b. Dééń nà Kwame dí-ìé?
 what PART Kwame eat-COMPL
 ‘What did Kwame eat?’
- c. * Kwame ði-ĩ (nà) dééń (nà)?
 Kwame eat-COMPL PART what PART
 ‘What did Kwame eat?’
- (7) a. Kofi bò-ò hwáń?
 Kofi beat-COMPL who
 ‘Who did Kofi beat?’
- b. Hwáń nà Kofi bó-ò nó?
 who PART Kofi beat-COMPL 3.SG.OBJ
 ‘Who did Kofi beat?’
- c. * Kofi bò-ò (nà) hwáń (nà)?
 Kofi beat-COMPL PART who PART
 ‘Who did Kofi beat?’

⁴ See Aboh and Dyakonova (2009) for a proposal on predicate doubling in focus/topic constructions in Gungbe and Russian.

As shown above, there are two types of *wh*-questions in Akan: (i) *wh*- in situ questions, where the *wh*-word remains in sentence final position (6a, 7a) and, (ii) *wh*- ex situ questions, where the *wh*-word is extracted to sentence initial position (6b, 7b). The particle *nà*, however, can be used to mark a *wh*-word only when it is extracted to sentence initial position (ex situ strategy) but cannot occur after or before a *wh*-word which is in situ. This accounts for the ungrammaticality of (6c, 7c). It can be noted, however, that the two strategies for asking a *wh*-question (ex situ and in situ) are only available in questions which target non-subject constituents like an object, a verb or an adjunct.⁵ On the other hand, in a *wh*-question which targets a subject, the *wh*-word is always extracted to sentence initial position. Again, the *wh*-word must be followed by *nà* (at least in all Twi dialects) or the sentence becomes ungrammatical (8b). In other words, for subjects, only the structure in (8a) is possible as a *wh*-question.⁶ However, in Fante, it is possible to have the extracted *wh*-word occurring without the particle *nà* (8c) although (8a) is preferred by most speakers (see Saah 1994). We will discuss the function of the particle *nà* in *wh*-questions in section 4.

- (8) a. Hwáń nà ò-píá-à Ama?
 who PART 3.SG.SUBJ-push-COMPL Ama
 ‘Who pushed Ama?’

⁵ Schwarz (2007:140) observes a similar situation in Kikuyu (Bantu language spoken in Kenya) that “all questions, except for subject questions, also have an *in-situ* version, which does not contain [focus] *ne*.”

⁶ The sentence in (8b), however, is acceptable in the Twi dialects as an echo question (i).

- (i). Wó sé hwáń pìá-à Ama
 2.SG say who push-
 COMPL Ama
 ‘You said who pushed Ama?’

- b. * Hwáń pǐá-à Ama?
 who push-COMPL Ama
 ‘Who pushed Ama?’
- c. Hwáná pǐá-à Ama? (Fa.)
 who push-COMPL Ama
 ‘Who pushed Ama.’

Similarly, it has been noted in the literature that there is asymmetry in the expression of subject focus (SF) and non-subject focus (NSF) in Akan (see Boadi 1974; Saah 1988; Marfo and Bodomo 2005; Fiedler et al. 2010). Thus, while non-subject focus can be in situ with prosodic prominence on the entity in focus (9A) or ex situ marked by *nà* (9A1), subject focus appears to be only ex situ marked by *nà* (10A). Thus, it would be ungrammatical to express focus on a subject when it is not extracted and followed by the *nà* particle (10A1).

- (9) Q: Kwame dǐ-ì déén?
 Kwame eat-COMPL what
 ‘What did Kwame eat?’
- A: Kwame dǐ-ì àmpèsíé
 Kwame eat-COMPL ampesie
 ‘Kwame ate AMPESIE.’
- A1: Àmpèsíé *nà* Kwame dǐ-íé
 ampesie PART Kwame eat-COMPL
 ‘It was AMPESIE that Kwame ate.’
- (10) Q: Hwáń *nà* ò-bá-à há?
 who PART 3.SG.SUBJ-come-COMPL here
 ‘Who came here?’
- A: Kwabena *nà* ò-bá-à há
 Kwabena PART 3.SG.SUBJ-come-COMPL here
 ‘It was KWABENA who came here.’

A1* Kwabena bá-à há
 Kwabena come-COMPL here
 ‘KWABENA came here.’

In this way, Akan differs from other languages which employ focus particles with respect to the environments in which the focus particles may occur. For instance, while in Hausa the focus particle *nee/cee* (alternate with gender) can be used both ex situ (11A1) and in situ (11A), in Akan the *nà* particle can only occur ex situ.

(11) Q: Mèe sukà kaamàa?
 what 3.PL.REL.PERF catch
 ‘What did they catch?’ (Hartmann and Zimmermann 2007:242).

A. Kiiifii nèe sukà kaamàa.
 fish PART 3.PL.REL.PERF catch
 ‘They caught FISH’ (Hartmann and Zimmermann 2007:242).

Q1: Mèenee nèe Audu ya sàyaa?
 what PART Audu 3.SG.REL.PERF buy
 ‘What did Audu buy?’ (Hartmann and Zimmermann 2007:247).

A1: Audu yaa sàyi zoobèe ne.
 Audu 3.SG.ABS.PERF buy ring PART
 ‘Audu bought a RING.’ (Hartmann and Zimmermann 2007:24).

It has been pointed out in the literature, however, that there is a difference between a *nà* focus marked sentence and a focus sentence not marked with *nà*. For example, with regard to wh-questions Saah (1988:19) proposes that “the sentences with clause-initial wh-words/phrases are more emphatic than those in which the wh-word does not occur in initial position.” Similarly, Boadi (1974:7) states that “we may characterise *nà* as the exclusive focus marker... *nà* narrows down the referential range of the constituent to which it is attached and places it in an exclusive class by itself.” Thus, although Boadi (1974) and Saah (1988, 1994) analyse the particle *nà* as the focus marker of the language they also recognized

that this particle has the additional meaning of exclusivity. I take this analysis to be essentially correct but make an even stronger case that the exclusive (or exhaustive) meaning is always present in sentence with narrow focus in which *nà* occurs. In other words, a characterization of *nà* merely as *the* focus marker obscures its function as exhaustive focus marker. In the next section, I will demonstrate with specific tests that *nà* only expresses a specific kind of focus namely, exhaustive focus.

3 Exhaustivity of *nà* Focus: the Tests

The notion of exhaustivity in focus constructions has been explored in different languages with different but interesting outcomes (e.g. Szabolsci 1981 for Hungarian; Horn 1981 for English; É. Kiss 1998 for Hungarian and English; Hartmann and Zimmermann 2007 for Hausa, etc.). It has long been noted that different strategies exist in languages for expressing different foci. É. Kiss (1998) makes a broad distinction between two kinds of focus, namely identificational and information focus, which she argues are expressed in language by different strategies. É. Kiss defines identificational (exhaustive) and information focus as in (12) and (13).

(12) Identificational Focus

An identificational focus represents a subset of the set of contextually or situationally given elements for which the predicate phrase can potentially hold; it is identified as the exhaustive subset of this set for which the predicate phrase actually holds (É. Kiss 1998:249).

(13) Information Focus

If a sentence part conveys new, nonpresupposed information without expressing exhaustive identification performed on a set of contextually or situationally given entities, it is a mere information focus (É. Kiss 1998:246).

Over the years, there have been various tests developed to tease out whether expression of focus on an entity or entities at issue is interpreted as exhaustive. I will consider some of these tests below with regard to *nà* focus constructions and focus constructions without this particle.

3.1 Coordination

The coordination test was used by Szabolsci (1981) to identify exhaustivity of focus in Hungarian. In this test, there is a pair of sentences: one with a focused coordinated DP, in the other, one of the coordinated DP is dropped. Where focus is exhaustive, the second sentence cannot be a logical consequence of the first. Here, there is a difference between ex-situ focus with *nà* and in-situ focus without this particle, and this is illustrated below in (14).

(14) Q: Dɛ́n nà Antwi tɔ̀-ɔ̀é?
 what PART Antwi buy-COMPL
 ‘What did Antwi buy?’

A: Àtààdéé né m̀pàbòá nà Antwi tɔ̀-ɔ̀é
 shirt and shoes PART Antwi buy-COMPL
 ‘It was **A SHIRT** and **SHOES** that Antwi bought.’

A1: Àtààdéé nà Antwi tɔ̀-ɔ̀é
 shirt PART Antwi buy-COMPL
 ‘It was **A SHIRT** that Antwi bought.’

B: Antwi tɔ̀-ɔ̀ àtààdéé né m̀pàbòá
 Antwi buy-COMPL shirt and shoes
 ‘Antwi bought **A SHIRT** and **SHOES**.’

- B1. Antwi tɔ̀-ɔ̀ àtààdéé
 Antwi buy-COMPL shirt
 ‘Antwi bought A SHIRT.’

Suppose a speaker gave the utterance in (14A) where the coordinated DP *shirt* and *shoes* are focused and marked with the particle *nà* then this speaker cannot give the utterance in (14A1) as a partial description of the former as this would amount to a contradiction. This is because the use of *nà* in (14A) implies that Antwi bought exactly two items (*a shirt* and *shoes*) while (14A1) implies that Antwi bought only a *shirt*. However, when a speaker gives the answer in (14B) where *shirt* and *shoes* are focused in situ (without *nà*), he can also give the answer in (14B1) as a partial answer for (14Q).

A variation of the coordination test involves focused numerals (see Szabolsci 1981). In this test, a numeral is added to a noun and focused; where focus is exhaustive the focused entity must be equal in number to the entity in question otherwise the sentences would be contradictory. For example, in (15A) the set of individuals who wrote an exam is given as four students, but (15A1) follows from (15A) because it follows that if four students wrote an exam then at least two students wrote an exam. However, (15B) contradicts (15B1) because while (15B) implies that exactly four students wrote an exam, (15B1) carries the implication that exactly two people wrote the exam. The difference between the A and B sentences in (15) is due to the kind of focus expressed: while in situ focus expresses mere information focus (15A-A1), ex situ focus with *nà* involves exhaustive identification of the entity (or entities) in focus.

- (15)Q: Àsùkúùfòó áhé nà wɔ̀-twéré-è òsòhwé nó?
 students how.many PART 3.PL-write-COMPL exam DET
 ‘How many students wrote the exam?’

A: Àsùkúùfòs ènán twèré-è òsòhwé nó
 students four write-COMPL exam DET
 ‘**FOUR STUDENTS** wrote the exams.’

A1: Àsùkúùfòs mmienu twèré-è òsòhwé nó
 students two write-COMPL exam DET
 ‘**TWO STUDENTS** wrote the exams.’

B: Àsùkúùfòs ènán nà wò-twèré-è òsòhwé nó
 students four PART 3.PL-write-COMPL exam DET
 ‘It was **FOUR STUDENTS** who wrote the exams.’

B1: Àsùkúùfòs mmiènú nà wò-twèré-è òsòhwé nó
 students two PART 3.PL-write-COMPL exam DET
 ‘It was **TWO STUDENTS** who wrote the exams.’

Thus, foci with the particle *nà* seem to involve ‘maximal informativeness’ while in situ foci tend not to be restricted by this property (Beck and Rullmann 1999). Further evidence for the characterization of the particle *nà* as exhaustive focus is found in its behavior in mention-some contexts.

3.2 Partial Answer Interpreted as Full Answer

Hartmann and Zimmermann (2007) proposed that if a focus (or focus-sensitive) particle cannot occur in mention-some focus environments then that particle has exhaustivity properties associated with it. Consider the following scenario adapted from Hartmann and Zimmerman (2007:253).

(16). A student, Kofi, who is anxious that he might have failed a test approaches his teacher and asks: ‘Can you tell me whether I have passed or not?’ Unfortunately, teachers are by law forbidden to tell a student directly about his or her result. However, there is no law forbidding them to talk about other students’ performances.

(17) Q: Tíkyà, mè-twà-à òsòhwé nó ànàá?
 teacher 1.SG-cut-COMPL exams DET Q
 ‘Teacher, did I pass the exam?’

A: Yaw twà-à ñsóhwé nó
 Yaw cut-COMPL exam DET
 ‘YAW passed the exams.’

A1: Yaw nà ò-twá-à ñsóhwé nó
 Yaw PART 3.SG.SUBJ-cut-COMPL exam DET
 ‘It was YAW who passed the exam.’

A2: Yaw nà ó-á-ń-twá ñsóhwé nó
 Yaw PART 3.SG.SUBJ-COMPL-NEG-cut exam DET
 ‘It was YAW who did not pass the exam.’

The answer in (17A) involves (new) informational focus where Kofi receives information that his classmate Yaw passed the exam but cannot infer from this answer anything about his status as far as passing the examination is concerned. However, Kofi may obtain more information about *his* status when *nà* marks the focused item. For instance, if the teacher gives (17A1) as an answer to Kofi’s question then Kofi may conclude that he did not pass the exam as the presence of the particle *nà* together with the focused entity (Yaw) implies that only Yaw passed the exam and the rest of the students, including Kofi, failed. Conversely, if (17A2) is uttered, then Kofi may conclude that he is among the group of students who passed the exam, since the sentence with narrow focus implies that the set of students who did not pass the exam includes only Yaw. In effect, although a teacher may not mention Kofi’s results directly to him (in keeping to the school’s regulations), he may unwittingly give out such information if in mentioning others who passed the exam he uses the particle *nà*. Thus, the particle *nà* fails in mention-some contexts because it identifies a focused item(s) as the exhaustive subset of situationally relevant given elements (É. Kiss 1998:249).

Example (17A), however, shows that it may be possible to have a focused subject in situ in certain contexts. In fact, Genzel (2013) has observed that *ex situ*

focus in Akan seems rather marked but in situ focus is preferred. I will return to this issue later in the discussion.

3.3 Distributional Restrictions on Exhaustivity: Additive particles *also/too*

É. Kiss (1998:251-253) notes that exhaustive focus behaves differently from informational focus. While the former bars certain operators such as additive particles *also/too* the latter may occur with such operators. The reason is that while exhaustive focus identifies only members of a set to the exclusion of others, *also/too* adds to the set. In Akan, the additive particle *ńsó* does not occur where focus is exhaustive. Compare the examples below in (18-19).

(18) Q: Èhéfa bíó nà Kwame kò-ðé?
 where else PART Kwame go-COMPL
 ‘Where else did Kwame go?’

A: Kwame kò-ð èfíé hó ńsó
 Kwame go-COMPL house there also
 ‘Kwame also went to the **HOUSE**.’

A1: Èfíé hó (*ńsó) nà (*ńsó) Kwame kò-ðé
 house there also PART also Kwame go-COMPL
 * ‘It was also the **HOUSE** that Kwame went to.’

(19) Q: Hwáń bíó nà ò-dí-ĩ àdùàné nó bíé?
 who else PART 3.SG.SUBJ-eat-COMPL food DET some
 ‘Who else ate the food?’

A: Frema ńsó ò-dí-ĩ àdùàné nó bí
 Frema also eat-COMPL food DET some
 ‘**FREMA** also ate the food.’

A1: Frema (*nso) nà (*nso) ò-dí-ĩ àdùàné nó bíé
 Frema also PART also 3.SG.SUBJ-eat-COMPL food DET some
 * ‘It was also **FREMA** who ate the food.’

Examples (18) and (19) illustrate the interaction of the additive particle with in situ focus and ex situ focus with the particle *nà*. It can be observed that when focus is in situ, the focused element can occur with the particle *ńsó* but when it is ex situ marked by *nà* the focused element cannot be expressed as an additional member of a situationally relevant set which has been already given in the discourse. This is because, as we have already noted, the particle *nà* marks the focused entity/entities as exhaustive member(s) of a set and, therefore, an additive operator cannot further perform the function of adding another entity to such a set. Similarly, while *ńsó* may occur in subject in situ focus, it is barred from ex situ focus because of the exhaustive implication carried by *nà*. Significantly, ex situ focus with *nà* cannot be used to answer a question which requires that we identify an additional member of a set without excluding other members (see É. Kiss 1998:253).

3.4 Necessity to Answer ‘no, also X’ instead of ‘yes, also X’

The final test involves the necessity to correct a speaker with ‘no, also X’ instead of ‘yes, also X’ when someone marks focus with the particle but intended it as a mention-some answer (see É. Kiss 1998; Hartmann and Zimmermann 2007). Here too, there is a difference between how exhaustive and non-exhaustive foci are corrected. Consider the following scenario in (20):

(20) Opoku goes to the market to buy some vegetables for cooking. Because he is unfamiliar with the market surroundings, he asks the first seller he meets, Serwaa, the question in (21Q).

(21) Q: Hwáń nà ò-tónè gyèéné wò há?
 who PART 3.SG.SUBJ-sell.HAB onions in here
 ‘Who sells onions here?’

A: Akua tònè bì
 Akua sell.HAB some
 ‘AKUA sells some.’

A1: Akua nà ò-tónè bí
 Akua PART 3.SG.SUBJ-sell.HAB some
 ‘It is AKUA who sells some.’

Sentences (21A) and (21A1) can be used as answers to (21Q) but (21A1) would imply that Akua is the only one who sells onions in that market. Consequently, if the implication that Akua is the only person who sells onions in the market is not true, then Serwaa may be corrected as in (22a) but not (22b). On the other hand, if a bystander wants to correct Serwaa on (21A), then (22b) would be used.

- (22) a. Dààbí, Akosua òsò tònè gyèéné wò há
 no, Akosua also sell.HAB onions in here
 ‘No, AKOSUA also sells onions here.’
- b. Àáné, Akosua òsò tònè gyèéné wò há
 yes, Akosua also sell.HAB onions in here
 ‘Yes, AKOSUA also sells onions here.’

The evidence so far shows that the particle *nà* as a focus marker always expresses strong exhaustivity. On the other hand, in situ focus expresses (new) information focus “without expressing exhaustive identification performed on a set of contextually or situationally given entities” (É. Kiss 1998:246). A few questions though remain which must be answered: (a) is the exhaustivity expressed by *nà* in focused sentences truth-conditional or a pragmatic inference? (b) why is subject focus expressed *ex situ* with *nà* as default even in contexts where exhaustivity is not at issue? and (c) what is the function of *nà* in *wh*-questions? The remainder of this paper addresses these questions.

3.5 Exhaustivity of Focus Marking with *nà* as a Pragmatic Inference

There has been considerable (still ongoing) discussion on how to characterize the exhaustivity effects associated with various constructions, such as preverbal *ex situ* focus in Hungarian (Szabolsci 1981, 1994; É. Kiss 1998), *it*-clefts in English (Horn 1981; Büring and Križ 2013) and morphological focus marking in *ex situ* environments in a number of West African languages (Zimmermann and Hartmann 2007; Fiedler et al. 2010). There is discussion in the literature, however, on whether exhaustive meaning of focus constructions without exclusive (exhaustive) markers is semantic (i.e. part of the truth-conditional meaning of a lexical item or structure) or a pragmatic inference. Although Amfo (2010:211) claimed that “the *nà*-focused entity is always asserted”, there are reasons to believe that this may not be the case. In other words, although a focused entity with *nà* is interpreted to mean ‘only X and nothing/nobody else,’ this meaning is not asserted or truth-conditional. This can be seen by comparing *nà* with the exclusive particle *ńkóáá* ‘only’.⁷

- (23) a. Arko t̀-̀ ò à̀sòmàdédéé ńkóáá
 Arko buy-COMPL earrings only
 ‘Arko bought only earrings.’

⁷ The particle *nà* may occur together with the exclusive particle *ńkóáá*. But the presence or absence of *nà* in sentences with *ńkóáá* does not affect the exclusive meaning of the sentence.

- (i) a. Kwame ńkóáá nà ò-k̀-̀-̀ fíé
 Kwame only PART 3.SG.SUBJ-go-COMPL home
 ‘Only Kwame went home/Kwame went home alone.’
- b. Kwame ńkóáá k̀-̀-̀ fíé
 Kwame only go-COMPL home
 ‘Only Kwame went home/Kwame went home alone.’

- b. Arko á-̀n-t́ à̀sò̀m̀àd̀éé́ n̄kóáá,
 Arko COMPL-NEG-buy earrings only
- ̀̀-̀̀-̀̀ à̀sò̀m̀àd̀éé́ né à̀hwènéé
 3.SG.SUBJ-buy-COMPL earrings and beads
 ‘Arko did not buy only earrings, she bought earrings and beads.’
- (24) a. M̀p̀à̀b̀òá ǹà Owura t́-̀̀éé
 shoes PART Owura buy-COMPL
 ‘It was **SHOES** that Owura bought.’
- b. * È-̀n-yé m̀p̀à̀b̀òá ǹà Owura t́-̀̀éé,
 3.SG.SUBJ.INA-NEG-be shoes PART Owura buy-COMPL
- ̀̀-̀̀-̀̀ m̀p̀à̀b̀òá né wókyé
 3.SG.SUBJ-buy-COMPL shoes and watch
 ‘It was not **SHOES** that Owura bought, he bought shoes and a watch.’

Although the sentences in (23a) and (24a) would be interpreted as involving a situation where the subject buys only one item, an earring in (23a) and shoes in (24a), they behave differently under negation. In (23b), when the initial clause which contains the exclusive particle *n̄kóáá* is negated the interpretation that Arko bought only earrings is negated. On the other hand, when negation is introduced into the clause containing the particle *nà* the exhaustive interpretation that Owura bought only shoes disappears leaving the presupposed information that he bought something. The different interpretation of (23b) and (24b) can be attributed to the fact that the exclusive particle *n̄kóáá* and the exhaustive focus particle *nà* do not project the same kind of meaning. Thus, Zimmermann and Onéa (2011:1666) note regarding exhaustive meaning of focus clefts that “crucially, the exhaustive meaning component is not part of the asserted meaning, but rather it comes with the flavor of some background inference.” Horn (1981) has suggested that exhaustive interpretation of clefts may issue from the fact that in using such a construction a speaker has “gone out of her way” to employ a marked structure to give information she could have provided using a “simpler alternative”. As a

result, addressees interpret focus clefts as conversationally implicating more information namely, exhaustive identification.⁸

Since exhaustivity may not be part of the semantic meaning of focus clefts, Zimmermann and Onéa (2011:1666) suggest that perhaps É. Kiss' (1998) bifurcation of focus into informational and identificational foci seems rather unmotivated, at least on the basis of clefts. However, as Zimmermann and Onéa (2011) admit, there are languages which have grammaticalized particles which are used to express exhaustive focus. The focus particle *nà* can be said to be of this sort as its occurrence always marks the focused element as exhaustive. Although it occurs in a cleft-like construction, most speakers normally use the construction by reducing 'it + be' constituent of the main clause leaving the focused constituent and the particle *nà*. Thus, there is no difference between (25a) and (25b) in terms of exhaustivity of focus, but (25a) has become the default construction for ex situ focus with *nà*.

- (25) a. Kofi *nà* ò-bá-à há
 Kofi PART 3.SG.SUBJ-come-COMPL here
 'It was **KOFI** who came here.'
- b. È-yè Kofi *nà* ò-bá-à há
 3.SG.SUBJ.INA-be Kofi PART 3.SG.SUBJ-come-COMPL here
 'It was **KOFI** who came here.'

4 Resolving the Subject/Non-Subject Focus Asymmetry

The foregone discussion has shown by means of various tests that ex situ focus with *nà* expresses exhaustivity while in situ focus expresses mere information focus. It has been observed, however, that in Akan, there is asymmetry between

⁸ For more information on the relationship between conceptual structure and grammatical structure in expressing fundamental concepts, e.g. causation, see Haiman (1983).

subject and non-subject focus in that while non-subject focus can be expressed in situ and ex situ, subject focus can only be expressed ex situ (Boadi 1974; Saah 1988, 1994). The claim that subject focus is always ex situ (with *nà*) seems problematic because it would imply that subject focus is always exhaustive although this is not a requirement for expressing focus. It is argued, however, that the supposed asymmetry between subject and non-subject focus may only be apparent and may be motivated by exhaustivity.⁹ Indeed, subject in situ focus naturally occurs in certain contexts. For instance, suppose Kwaku, upon returning from work, has been informed that Kwadwo came looking for him, but he had been expecting another person, Adwoa, to have come looking for him, so he asks (26Q). As a response to this question, a focused subject can only be expressed in situ (26A) and not ex situ with *nà* (26A1). The reason is that, as we have iterated above, ex situ focus implies that focus is exhaustive entity but in this context the focused subject would have to be an addition to a background set of relevant individuals and not an exhaustive set in itself (see section 3.3).

(26) Q: Hwáń bíó nà ò-bà-à hà
 who else PART 3.SG.SUBJ-come-COMPL here
 ‘Who else came here?’

A: Adwoa òsò bà-à há
 Adwoa also come-COMPL here
 ‘ADWOA also came here.’

A1* Adwoa òsò nà ò-bá-à há
 Adwoa also PART 3.SG.SUBJ-come-COMPL here
 ‘*It was also ADWOA also who came here.’

⁹ A similar view is expressed by Genzel (2013:184-185) who states that “it seems that there is no subject [a]nd non-subject asymmetry in Akan, at least not in the original sense of the term.”

There is another context in which subject in situ focus may be more acceptable than subject ex situ focus. For instance, when the relevant individuals for an answer cannot be exhaustively listed, the in situ strategy may be used instead to focus some of the relevant individuals. For instance, when (27Q) is uttered, it would be distinctly odd to use the ex situ strategy (27A1) to focus part of the set, because focus expressed this way is understood to be exhaustive.

(27) Q: Hwáń nà ð-bá-à àyíé nó?
 who PART 3.SG.SUBJ-come-COMPL funeral DET
 ‘Who attended the funeral?’ (i.e. Who attended the funeral?)

A: Kofi bá-àé
 Kofi come-COMPL
 ‘**KOFI** came.’

A1* Kofi nà ð-bà-àé¹⁰
 Kofi PART 3.SG.SUBJ-come-COMPL
 ‘It was **KOFI** who came.’

Thus, it can be concluded that subject in situ focus is possible in some focus contexts. However, when the context does not require that what is focused be non-exhaustive, focus tends to be ex situ for subjects. Hence, even in contexts where exhaustivity is not required, subject focus is expressed ex situ with *nà*. Fiedler et al. (2010), however, observe the following regarding subject focus across many Kwa and Gur languages (28):

¹⁰ The sentence in (27A1) is acceptable only in the context where the speaker believes that of all those who attended the event Kofi is the only person that the addressee knows.

- (28). The special status of focused subjects is conditioned by information-structural factors... Subjects in their canonical sentence-initial position are prototypically interpreted as topics. Consequently, if the context establishes a subject as focus, this conflicts with its primary information-structural function as non-focal topic. In order to resolve this conflict, the focused subject will have to be realized in a non-canonical structure, for instance, by means of special morphological markers and/or syntactic reorganization (Fiedler et al. 2010:249).

In other words, although subject focus can be expressed *in situ* (where the focused subject remains in its canonical subject position), this is not preferred because nothing would distinguish the focused subject structurally and/or morphologically from being interpreted as a topic. To resolve this potential ‘information-structural function’ conflict, therefore, subject focus tends to be marked structurally by movement (or base-generation, à la Saah 1994) and morphologically with *nà* when the focused answer is not required to be non-exhaustive. Thus, speaker and addressee may take exhaustivity for granted (when it is not at issue) in default subject focus marking.

Non-subjects, on the other hand, do not face such information-structural restrictions as subjects and as such pattern according to whether focus is meant to be exhaustive (or identificational) or merely informational. Genzel (2013:179-181) reports that in a survey of twenty two Akan speakers all the participants answered a *wh*-question targeting an object and eliciting ‘narrow informational focus’ with *in situ* focus. Thus, Genzel notes that “the *in-situ* strategy is clearly the preferred one with narrow informational focus and also with narrow corrective focus.” (Genzel 2013:182).

This notwithstanding, there must be an explanation for the use of the particle *nà* in *wh*-questions with a fronted *wh*-word. It was noted in section 2 that in Akan, there are two kinds of *wh*-questions: one with the *wh*-word *in situ*,

without the particle *nà* (29a), and another with the wh-word fronted and marked with *nà* (29b).

(29) a. Ama húnù-ù hwáń?
 Ama see-COMPL who
 ‘Who did Ama see?’

b. Hwáń *nà* Ama húnù-ù nó?
 who PART Ama see-COMPL 3.SG.OBJ
 ‘Who did Ama see?’

According to Saah (1988:19), intuitively, wh- ex situ questions marked by *nà* are more emphatic than those without it.¹¹ Ofori (2011:258), on the other hand, proposes that in “the in-situ question, the questioner expects the addressee to know the answer– the question is simply the speaker’s invitation to the addressee to provide information the addressee is known to have” but the ex situ wh-question is used when the “speaker thinks or assumes that the addressee may not know the answer and/or when the speaker needs the answer very badly.” Unfortunately, however, Saah (1988) and Ofori (2011) do not provide any tests to tease out the proposed intuitive distinction between the two kinds of wh-questions and neither will this be pursued in this paper. Rather, the concern is that since the occurrence of *nà* in ex situ environments is associated with strong exhaustivity one would expect that ex situ wh-question marked by *nà* would require an exhaustive answer while in situ wh-question would impose no such requirement. On the contrary, *nà* does not express exhaustivity in a wh-question and, therefore, a speaker is not bound to give an answer with exhaustive focus. Notice too, that in a wh-question *nà* can freely occur with additive particles (30Q)

¹¹ Marfo and Bodomo (2005:184) contest this view. They argue that “a fronted Q-word does not invoke any further emphasis than what it inherently does at an in situ position in Akan.”

although such particles do not occur in exhaustive focus environments with the same particle (30A).

(30) Q: Dééń *nísó* nà Tutu tó-ðé?
 what also PART Tutu buy-COMPL
 ‘What else did Tutu buy?’

A:* Kwàdú *nísó* nà Tutu tó-ðé
 banana also PART Tutu buy-COMPL
 ‘It was BANANA (*also) that Tutu bought.’

Thus, it appears that exhaustivity associated with *nà* in ex situ environments is neutralized in wh-questions. This is consistent with Beck and Rullmann’s (1999) theory of exhaustivity in questions. Following Heim (1994), Beck and Rullmann (1999:296) note that “that exhaustivity is not a property of the basic question denotation, but comes about through the way question meanings get integrated semantically and interact with their linguistic context.” In other words, questions tend to allow for several ‘interpretational possibilities’ which may be recoverable from the context of interaction and exhaustivity may depend on how much information a speaker/addressee has in the context of the interaction. Interestingly, in Akan, as Saah (1994:109) notes, the wh-word can be fronted in wh-questions without the particle *nà*, as shown in (31) below.

- (31) a. Wóáná nà ó-fré-è Ama? (Fa.)
 who PART 3.SG.SUBJ-call-COMPL Ama
 ‘Who called Ama?’ (Saah 1994:109)
- b. Wóáná fré-è Ama? (Fa.)
 who call-COMPL Ama
 ‘Who called Ama?’ (Saah 1994:110)

Accordingly, Boadi (1974:53) observed that “interrogative markers are inherently identificational and that it is only in certain surface syntactic environments that

they are automatically accompanied by *nà*”. An explanation for the optionality of *nà* in some questions could be that the particle’s semantics is not projected in questions and is, therefore, not semantically/pragmatically required in the construction.

5 Conclusion

This article has considered some evidence which shows that ex situ focus marked by the particle *nà* in Akan expresses exhaustive focus while in situ focus expresses informational focus. It has also been shown that the fact that subject ex situ focus occurs as default focus marking should not be taken to mean that subject in situ focus is impossible in the language. The default subject ex situ focus, however, is motivated by the fact that in their canonical position, a subject risks being interpreted as topic and is therefore marked structurally and morphologically to distinguish it from a topic (Fiedler et al. 2010). Nevertheless, because such marking is associated with exhaustivity, when the context requires that the focused subject be non-exhaustive, then a subject can only be focused in situ. Thus, the focus particle *nà* can be appropriately identified as an *exhaustive focus particle* because it occurs only in exhaustive focus environments, except in questions, where the exhaustivity associated with the particle is neutralized by question semantics.

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Reginald Akuoko Duah
University of Ghana, Legon
College of Humanities
School of Languages
Department of Linguistics
P. O. Box LG61
Legon-Accra
Ghana
raduah@ug.edu.gh

The Syntax of Focus and Interrogation in Awing: a Descriptive Approach

Henry Z. Fominyam
University of Potsdam

According to Aikhenvald (2007:5), descriptive linguistics or linguistic fieldwork “*ideally involves observing the language as it is used, becoming a member of the community, and often being adopted into the kinship system*”. Descriptive linguistics therefore differs from theoretical linguistics in that while the former seeks to describe natural languages as they are used, the latter, other than describing, attempts to give explanations on how or why language phenomena behave in certain ways. Thus, I will abstract away from any preconceived ideas on how sentences ought to be in Awing and take the linguist/reader through focus and interrogative constructions to get a feeling of how the Awing people interact verbally.

Keywords: Awing, focus realization, question formation, descriptive grammar

1 Introduction

This paper describes the various ways to realize focus and interrogative constructions in Awing¹, a Grassfield Bantu language spoken in the North West Region of Cameroon. The first section deals with the different methods that Awing native speakers have recourse to in order to emphasize a given constituent (information structuring). The second part of the paper tackles interrogative constructions. I begin with a detailed presentation of content

¹ The Awing language numbers about 20.000 speakers according to the Awing Civil Status Registrar (2006). The language cannot boast of any substantial scientific work. The data presented here is from the authors own native intuition, in corroboration with other native speakers.

question words and end with a cursory description of other interrogative constructions such as: yes-no questions, questioning by truncation, tag questions, echo questions, alternative questions and modal inversion in question formation.

The Awing empirical data presented in this paper demonstrate some obvious similarities between Awing and other Bantu languages, including the phenomena of morphological focus marking, obligatory focus marking in *ex-situ* contexts, verb doubling in predicate focusing and *wh*-expressions optionally realized in their base generated positions or in sentence-initial positions. However, the Awing data also show some properties not common in the literature. This will include, among others, the realization of a so-called focus marker (FM)² in post-verbal positions. In this vein, we will see that *wh*-expressions can occur either with or without the FM *in-situ*, but that the FM is obligatory in *ex-situ* contexts—in parallel with focusing. Awing also displays what might be considered multiple realization of post-verbal foci with the overt realization of the FM. However, the FM cannot be realized successively with multiple *wh*-expressions, although focusing and *wh*-expressions exhibit the same structural patterns in this language. In polar question formation, the Awing language interlocks phonology and syntax by lengthening the final phoneme of a sentence-final morpheme to type the clause as interrogative. Moreover, while going through the Awing data, one will notice that (almost) all content words (i.e. nouns, verbs and adjectives/adverbs) in this language have long and short forms. This will introduce us to a morpho-syntactic structure in which the verb and the direct object are truncated in order to type the clause as interrogative.

² Abbreviations: ASP: Aspect marker; COP: Copular verb; F1: Future one; F2: Future two; F3: Future three; FM: Focus marker; INF: Infinitive; LINK: Linking morpheme; LP: Lengthened phoneme; NEG: Negation marker; NP: Noun phrase; PLU: Plural marker; PP: Prepositional phrase; P1: Past one; P2: Past two; P3: Past three; QM: Question marker; SM: Subject marker; TM: Tense marker; TOP: Topic marker; TQ: Tag question marker; ?: Contextually/pragmatically not fit; *?: Mild ungrammaticality; *:Ungrammaticality.

The paper is organised as follows. Section 2 discusses focus realization. But first, Section 2.1 presents the various functions the *lɔ* morpheme (i.e. the alleged FM) can assume apart from associating with focus. In section 2.2, I concentrate on how focus is realized with the *lɔ* morpheme. Section 2.3 describes the morpho-syntactic marking of focus, which will be seen as the rearrangement of the sentence by displacing the focused phrase to sentence-initial position. Note that I will leave aside the question here of whether it is theoretically warranted to consider the *lɔ* morpheme to be a FM. I will gloss the morpheme as the FM whenever it occurs with a focused phrase and it clearly does not fulfil any of the other functions the morpheme has. Section 2.4 will tackle predicate focus constructions while section 2.5 will be dealing with predicate focus and *wh*-expressions. Then section 3 discusses interrogative clauses. In section 3.1, the overall organisation of matrix *wh*-expressions is presented. Section 3.2 will continue with *wh*-expressions in embedded clauses while section 3.3 will have to do with multiple *wh*-expressions. In this section, we will see that unlike English, Awing demonstrates no superiority effects. The rest of the work will be dedicated to other question types and section 4 presents the conclusive remarks.

2 Focus-marking in Awing

Focusing can be considered as the structuring of sentences via a wide range of techniques: prosodic, morphological and syntactic means, in order to introduce information assumed to be unfamiliar to the addressee. The Awing language appears to use each of these three methods to achieve focusing. However, prosody in focusing will not be discussed here, since it is not clear how this functions in Awing in particular and tonal languages in general, or if the grammars of tonal languages truly make use of prosody in focusing.

Nevertheless, it is important to mention from the onset that morphological focus-marking is only used in this language when the intention is to contrast, correct or indicate an exhaustive nature of the focused phrase. In other words, a focused phrase does not necessarily need to be realized with the particular morpheme that is considered to be the focus marker in Fominyam (2012). For example, in both subject and object focus, as those below, the assumed focus marker may not be used with the focus.

- (1) a. Alombah à pí náɣnè kɛ́
Alombah SM P1 cook what
‘What did Alombah cook?’
- b. Alombah à pí náɣnè ndzɔ̃
Alombah SM P1 cook beans
‘Alombah cooked **beans.**’
- c. #Alombah à pí náɣnè lɛ́ ndzo
Alombah SM P1 cook FM beans
‘Alombah SM P1 cook beans.’
- (2) a. Wɛ́ pí náɣnè ndzɔ̃
who P1 cook beans
‘Who cooked beans?’
- b. Alombah à pí náɣnè ndzɔ̃
Alombah SM P1 cook beans
‘Alombah cooked beans.’
- c. *Lɛ́ Alombah à pí náɣnè ndzɔ̃
FM Alomnah SM P1 cook beans
‘Alombah cooked beans.’

Example (1c) is not a felicitous reply to (1a). This is due to a contrastive and/or corrective interpretation attributed to the focused phrase when associated with the *lɛ́* morpheme. (2c) is ungrammatical not only because of the *lɛ́* morpheme but also due to the syntactic position of the focused subject; we return to this in section 2.3. However, I will label this *lɛ́* morpheme as the F(ocus) M(arker) (FM in order not to get into any theoretical arguments.

2.1 *lɔ* as a multifunctional morpheme

The *lɔ* morpheme can be interpreted as the verb ‘be’ in copular clauses, as shown in the examples in (3) through (6).

Specification:

- (3) a. ɛ̀lɛ́n nɔ́ lɔ́ Alombah Or b. Alombah lɔ́ ɛ̀lɛ́n yá
 Name his ? Alombah Alombah ? name his
 ‘His name is Alombah.’ ‘Alombah is his name.’

- (4) a. Àlànǝ́ Santa lɔ́ chíǝ́ ndú yí shí'nè
 Road Santa ? really way LINK good
 ‘The Santa road is the best way.’

Or

- b. Chíǝ́ ndú yí shí'nè lɔ́ àlànǝ́ Santa
 Really way LINK good ? road Santa
 ‘The best way is the Santa road.’

Equative:

- (5) Ngán mbéwíǝ́ lɔ́ pɔ́
 People Awing ? them
 ‘The Awing people are them.’ (i.e. the exact type of people you need)

Identification:

- (6) a. Líè (lɔ́) ndzímè mè b. Mɔ́-mbyáǝ́nè yíá *(lɔ́) ndzímè mè
 That ? brother my Child-man that ? brother my
 ‘That’s my brother.’ ‘That boy is my brother.’

Unlike in English, the copula is optional (cf. 6a) when the demonstrative determiner is not used with a specific noun, but when there is a nominal (cf. 6b),

the copula must be used.³ As for copular clauses, it appears that the copula *lá* can only be used with nominal arguments (i.e. NP *be* NP). Thus, we cannot use a copula with a bare adjective, like ‘The house is big’ or ‘The Santa road is faster’, — as shown in (7) below.

- (7) *Àláṅè Santa ló zánkè-ngénè
 Road Santa ? quick-go
 Intended: ‘The Santa road is faster.’

Instead, it should be:

- (8) Àláṅè Santa è zánkè-ngénè
 Road Santa ? quick-go
 ‘The Santa road is faster.’

The *è* morpheme in (8) is the same morpheme that shows up in this language as a non-animate subject marker (SM). I will not make any speculations as to whether this word functions in (8) as a copula, a subject marker or a pronoun. Moreover, it is argued by some researchers that the copula used in sentences as those above might involve different lexical items from a semantic point of view, with a specification, identification, or equative meanings, (see Mikkelsen

³ The morpheme considered to be the copula here is questionable. When sentences are constructed in the past tense, there is another morpheme that shows up and is read as the copula. See examples below:

- (i) Mó-mbyáṅnè yíó nó mbè ló ndzímè mè
 Child-man that P2 be ? brother my
 ‘That boy was my brother.’
- (ii) Aghetse nó mbè ló ndzé’kè-ṅwárè
 Aghetse P2 be ? teach-book
 ‘Aghetse was a teacher.’

When sentences are constructed in the past tense as those above, neither the *mbè* ‘be’ nor the *lá* morpheme can be omitted. However, since I am concerned with a descriptive presentation here, the question of whether *lá* or *mbè* is the correct copula is postponed for future research.

(2005)). For the purpose of this overview, I consider it sufficient to conclude that *lá* in the above examples functions as a copula.

The *lá* morpheme is also used in sentences having a tense marker (TM) and a verb to render passivation possible, as shown in (9b).

- (9) a. Alota à pí ntsià mbéndé
 Alota SM P1 push wall
 ‘Alota pushed the wall’ (active /neutral sentence)
- b. Mbéndé lá pí ntsià Alota
 Wall ? P1 push Alota
 ‘The wall was pushed by Alota’ (passive sentence)

In the examples below, *lá* is considered to be the FM. It precedes the focused phrase which can be realized post-verbally or in sentence-initial position.

- (10) a. Ngwe à pí nghènè lá fú
 Ngwe SM P1 go FM where
 ‘Where has Ngwe gone to?’
- b. (Ngwe) à pí nghènè lá mètèèné
 Ngwe SM P1 go FM market
 ‘Ngwe/he went to the MARKET.’ (not to the hospital or the farm)
- c. *(Lá) mètèèné pá’á (Ngwe) à pí nghènè
 FM market that Ngwe SM P1 go
 ‘Ngwe/he went to the MARKET.’ (not to the hospital or the farm)

With the example in (11b), the *lá* morpheme functions as an additive topic marker. The sentence in (11a) creates an appropriate context for (11b).

- (11)a. Fominyam à nó nfé àṅwàré àmbó pó piè
 Fominyam SM P2 give book to children his
 ‘Fominyam gave books to his children.’

- b. Azise *(lǎ), Fominyam a nǎ kǎ nfé àṅwárè àmbó *(yí)
 Azise TOP Fominyam SM P2 also give book to her
 ‘How about Azise, did Fominyam give her a book, too?’

The asterisks on the parentheses in example (11b) indicate that this morpheme cannot be optional when the intended interpretation is required. Notice that the resumptive pronoun in (11b) cannot be omitted either.

Lastly, the *lǎ* morpheme can be used as an adversative conjunction (cf. 12).

- (12) àlén nǎ lǎ Alombah lǎ zó lǎ Alota
 Name his is Alombah but yours is Alota
 ‘His name is Alombah but yours is Alota.’

The above data show that the *lǎ* morpheme in this language functions as: (i) the verb ‘be’ in copular clauses, (ii) an element rendering passivation possible, (iii) a focus marker (must precede the focalized item), (iv) a topic marker (must follow the topicalized item), and (v) a conjunction (opposing the predication of two clauses). In what follows, I use this morpheme as in example (10) and simply gloss it as the FM.

2.2 Morphological marking of focus

The morphological means of focus-marking introduces a morphological element to the focused phrase. In the case of Awing, the FM always precedes the focused phrase. When the morpheme precedes a constituent, the latter may be unfamiliar but necessarily construed as contrastive and/or corrective depending on the context. The first part of this section will deal with focused elements within the lower domain (i.e., the area below the complementizer layer). We will call this *in-situ* focus since focused phrases in this domain do not display any syntactic movement. In *in-situ* focusing, the *lǎ* morpheme targets constituents that follow the verb. The verb and the subject in Awing can only be focused by means of syntactic displacement. Consider the examples below which show for each

constituent that it is interpreted as contrastive when directly preceded by the *lá* morpheme in post-verbal positions.

- (13) a. Ayafor à yó yí **lá** ndé zónè ní ñkáp zìè
 Ayafor SM F1 come FM house tomorrow with money his
 ‘Ayafor will come to THE HOUSE tomorrow with his money’ (not the market or on campus)
- b. Ayafor à yó yí ndé **lá** zónè ní ñkáp zìè
 Ayafor SM F1 come house FM tomorrow with money his
 ‘Ayafor will come to the house TOMORROW with his money’ (not today or the day after tomorrow)
- c. Ayafor à yó yí ndé zónè **lá** ní ñkáp zìè
 Ayafor SM F1 come house tomorrow FM with money his
 ‘Ayafor will come to the house tomorrow WITH HIS MONEY’ (not with any other item)

Caps are used throughout this paper to represent the focused phrases. In (13a) the direct object *ndé* ‘THE HOUSE’ is the focused element. Semantically, the speaker supposes that ‘Ayafor’ will bring his money to the house, not to the market place or to the school campus, but specifically to the house (contrastive focus). Likewise (13b) and (13c) will be interpreted on the same basis: ‘Ayafor’ will come tomorrow and no other day for (b), and ‘Ayafor’ will come with his money and nothing else for (13c). The *lá* morpheme or FM obligatorily attributes a contrastive feature to the constituents it precedes *in-situ*. However, this morpheme cannot be merged with the verb and the subject *in-situ*, as the ungrammaticality of the examples below indicate.

- (14) a. ***Lá** Ayafor à yó yíè ndé zónè ní ñkáp zìè
 FM Ayafor SM F1 come house tomorrow with money his
 Intended: ‘AYAFOR will come to the house tomorrow with his money’

- b. *Ayafor à yó lǎ yíè ndé zónè ní ñkáp zíè
 Ayafor SM F1 FM come house tomorrow with money his
 Intended: ‘Ayafor will COME to the house tomorrow with his money’

The grammatical subject and the verb cannot be morphologically focus-marked *in-situ*. In order to focalize the verb, the structure will have to double the verb in sentence-final position (to be made obvious as we proceed). On the other hand, when subjects are focalized, they cannot remain in their canonical positions, as seen in example (15), where the subject is obligatorily followed by the relative marker *pá’á*⁴ ‘that’ and the subject marker, respectively.

- (15) Lǎ Ayafor *(pá’à)*(à) yó yíè ndé zónè ní ñkáp zíè
 FM Ayafor that SM F1 come house tomorrow with money his
 ‘It is Ayafor that will come to the house tomorrow with his money’

The main difference between (14a) and (15) is the absence of the relative marker ‘that’. The reasoning is that the subject in (14a) has been displaced from within the IP domain to the complementizer domain and as such, an overt linker is needed (as shown by the relative marker *pá’á* ‘that’ in (15)) to link the focused expression to the IP.

One striking phenomenon in Awing is that more than one constituent can be focalized post-verbally. In such cases, the FM will precede any constituent which the speaker intends to make salient. Note, however, that in such a situation the speaker is trying to contradict/correct what s/he believes the listener(s) knows about the targeted constituents. An example like (16) can most naturally occur in an argumentative context in which one of the speakers decides to show some degree of knowledge or pragmatically foregone conclusion—by

⁴ The status of the *pá’á* morpheme has been altered here. In Fominyam (2012), I consider this morpheme a complementizer, in complementary distribution with *ngá*, and glossed both morphemes as ‘that’. However, this morpheme cannot be seen as such since it can only occur in the left periphery preceded by focalized or relativized nominals, or wh-expressions.

using the *lá* morpheme to indicate the exact status of the constituents following it.

- (16) a. Ayafor à yó yí lá ndé, lá zónè ní ñkáp zìè
 Ayafor SM F1 come FM house FM tomorrow with money his
 ‘Ayafor will come to THE HOUSE, TOMORROW with his money’
- b. Ayafor à yó yí lá ndé, lá zónè, lá ní ñkáp zìè
 Ayafor SM F1 come FM house FM tomorrow FM with money his
 ‘Ayafor will come to THE HOUSE, TOMORROW, WITH HIS MONEY’

Example (16a) presents two foci while (16b) has three. However, these examples may not constitute a single phonological sequence. There is a phonological pause after each constituent preceded by the *lá* morpheme (indicated with a comma). The discussion so far reveals that there is a lower focus domain in Awing, a post-verbal position which can accommodate focused phrases. Unlike in most languages where the alleged FM shows up only within the left peripheral domain (see Reineke 2007 for Byali; Aboh 2007 for Gungbe; Biloa 2014 for Tuki; Bassong 2014 for Basa’a, among others), Awing has such a morpheme in sentence-internal position. We now turn to displaced focused phrases.

2.3 Morpho-syntactic marking of focus

Morpho-syntactic marking of focus constitutes the displacement of constituents (i.e., phrasal movements) with the obligatory use of the FM in Awing. The displaced constituents move to sentence-initial position. Such phrasal movements, just as what we have been discussing concerning focusing in general, are motivated by either the speaker’s assessment of the hearer’s degree of ignorance, or most importantly, the speaker’s intention to correct the hearer’s strength of contrary belief. A further pragmatic investigation (Fominyam in

progress) reveals that speakers of this language often move constituents to sentence-initial position when they intend to portray paralinguistic⁵ attitudes such as surprise or annoyance, indicating that this movement is not imposed by any grammatical condition, but rather a free choice of the speaker.

However, the assertion that moved foci are not imposed by the grammar may not apply to subject focusing⁶. It is conceivable that the morpho-syntactic focus-marking strategy in Awing involves a cleft structure. These cleft-like sentences are structures in which a constituent is extracted from its base-generated position and set off (moved to the C-domain) with additional elements. In English, the additional elements consist of the expletive subject ‘it’ with the verb ‘is’, —the existential verb ‘to be’. These two combine to form the copula construction ‘it is’.

In Awing, the cleft-like sentence is introduced with what I have so far considered the focus marker (FM). Zerbian (2006) also notes that for some Bantu languages, it has been argued that the copula underwent grammaticalization towards a focus marker. As we have already seen, this is supported by the fact that the FM can be interpreted as ‘is’ (3rd person singular present of ‘be’). The pattern is as follows. The FM introduces the focus-marked constituent in sentence-initial position, that is, the constituent that is focalized follows the FM and a relative marker immediately follows the latter. The relative marker *pá’à* ‘that’ is mandatory and as such, the focus sentence will be ungrammatical without it. Consider the following examples where any

⁵ I will not discuss this further here. I refer the reader to the manuscript ‘On some aspects of *in-situ* and *ex-situ* foci in Awing—why move to the C-domain?’ (Fominyam in progress).

⁶ This is a theoretical issue which needs further investigation. Moreover, subjects can be focalized *in-situ* under the label of prosodic focus marking, which is completely ignored in this paper. In such cases, the focused subject remains *in-situ* with no overt focus marking clue.

constituent within the lower domain can be preposed (except the predicate). (17a) is the input sentence.

- (17) a. Ayafor à yó yíè ndé zónè ní ñkáp zìè ghá-kwánè
 Ayafor SM F1 come house tomorrow with money his time-back
 ‘Ayafor will come to the house tomorrow evening with his money.’
- b. subject displacement:
 Ló Ayafor pá’á à yó yíè ndé zónè ní ñkáp zìè ghá-kwánè
 FM Ayafor that SM F1 come house tom. with money his time-back
 ‘It is Ayafor that will come to the house with his money tomorrow evening’
- c. direct object displacement:
 Ló ndé pá’á Ayafor à yó yíè zónè ní ñkáp zìè ghá-kwánè
 FM house that Ayafor SM F1 come tom. with money his time-back
 ‘It is in the house that Ayafor will come with his money tomorrow evening’
- d. time adverbial displacement:
 Ló ghá-kwánè pá’á Ayafor à yó yíè ndé zónè ní ñkáp zìè
 FM time-back that Ayafor SM F1 come house tom. with money his
 ‘It is in the evening that Ayafor will come to the house tomorrow with his money’
- e. Prepositional phrase displacement:
 Ló ní ñkáp yíè pá’á Ayafor à yó yíè ndé zónè
 FM with money his that Ayafor SM F1 come house tomorrow
 ghá-kwánè (ní zérè)
 time-back with it
 ‘It is with his money that Ayafor will come to the house tomorrow evening’

From (17a–e), one notices that every constituent within the lower domain except the predicate can be preposed. When these constituents are in sentence-initial position, they are not resumed within the lower clause. However, the prepositional phrase (PP) is an exception to this generalization as there can be an optional preposition with a pronoun in the lower domain. We have seen that any

constituent but the verb can move to sentence-initial position. So how is verb-focus achieved in this language?

2.4 Predicate focus constructions

In Awing, as in most Bantu languages (see, e.g., Nkemnji 1995; Mutaka & Tamanji 2000), the overall sentence ends up having two verbs when there is verb focus. Specifically in Awing, a conjugated form of the verb appears in the canonical position and an infinitive form shows up in sentence-final position. It is the second or final copy that is morphologically focus-marked. Example (18) below illustrates this for a non-transitive verb.

- (18) a. Seh à pí ñkínè b. Seh à pí ñkín ló kín-nè
 Seh SM P1 cry Seh SM P1 cry FM cry-INF.
 ‘Seh cried’ ‘Seh (actually) CRIED’
- c. *Seh à ló kín kín-nè d. ? Seh à pí kín kín-nè
 Seh SM FM cry cry-INF Seh SM F1 cry cry-INF
 Intended: Seh (actually) CRIED’ Intended: ‘Seh (actually) CRIED’

The example in (18c) is ungrammatical because the focus marker precedes the first verb rather than the second one. The ungrammaticality of (18d) is a mild one because there is no FM. Some speakers may even use sentences like (18d) in predicate focusing. But then, the sentence in (18d) will not have the same contrastive verb-focus interpretation like that in (18a). (18d) will be interpreted as a sort of verbal intensification—increasing the degree of the action (adverbial). The suffix *-nè* that appears in the second verb is one of the infinitive markers of this language (cf. Fominyam 2012: Chapter 2). Example (19) shows another verb focus example, this time with a transitive verb.

- (19) a. Seh lá'à p'ò'è mó yíè b. Seh lá'à p'ò'è mó yíè *(l'ó)p'ò'-nè
 Seh F3 beat child her Seh F3 beat child her FM beat-INF
 ‘Seh shall beat her child.’ ‘Seh shall BEAT her child.’

Notice that the FM comes after the direct object ‘her child’ and immediately precedes the duplicate or second verb. In such a position, the focus marker cannot be optional, as the asterisk on the parentheses indicates. Unlike in the cleft-like constructions where a focused item is in sentence-initial position, focused verbs show up in ‘sentence-final position’ in descriptive terms.

2.5 Predicate focusing and wh-expressions

It is possible to have a predicate-focused construction in Awing where the subject is questioned with the use of a wh-expression. Consider (20) where different ways of forming such questions are presented. (20a) is the input sentence.

- (20) a. Montoh à yó pò’è mó yíà
 Montoh SM F1 beat child her
 ‘Montoh will beat her child’ (declarative)
- b. Montoh à yó pò’è mó yíà lé pò’-nè
 Montoh SM F1 beat childhis FM beat-INF
 ‘Montoh will BEAT her child’ (declarative with verb focus)

Interrogatives:

- c. Wé yó pò’è mó yíà?
 WhoF1 beat child her
 ‘Who will beat her child?’ (Interrogative with the wh-expression in-situ)
- d. Lé wé pá’à à yó pò’è mó yíà?
 FM who that SM F1 beat child her
 ‘WHO will beat her child?’ (Interrogative with subject displacement)
- e. Wé yó pò’è mó yíà lé pò’-nè?
 who F1 beat child her FM beat-INF
 ‘Who will BEAT her child?’ (Interrogative with verb doubling)

- f. Lǎ wǎ pá'a à yó pǒ'è mó yíà lǎ pǒ'-nǎ?
 FM who that SM F1 beat childher FM beat-INF
 'WHO will BEAT her child?' (Interrogative with verb doubling and wh-subject displacement)
- g. Lǎ yó pǒ'è wǎ pǒ'è mó yíà?
 FM F1 beat who beat child her
 'WHO will BEAT her child?' (Interrogative with emphasis on in-situ wh-subject and verb doubling)

(20a–g) show various ways that can be used to form the question(s) 'who/WHO will BEAT her child?' (20a) is the neutral declarative sentence. (20b) presents a simple predicate focus where the focused verb ends up in sentence-final position. Here the intention is to contrast the focused verb 'BEAT' with its implicit alternatives, say to pamper or indulge. (20c) questions 'who will beat her child?'. In (20d) the wh-expression is in sentence-initial position and, as such, emphasis is laid on the 'WHO'. Notice that in both (20c) and (20d), the verb is not focalized. The difference between (20e) and (20f) is that in the former, the speaker just wants to know who will beat the child (instead of pampering him/her), in the latter s/he wants to know what type of an individual (focusing/emphasis) will beat the child, instead of pampering him/her. The movement of constituents in (20f) and (20g) seems more intriguing.

Note that in (20f), the wh-word has been moved to sentence-initial position. In addition, the second copy of the verb is focalized in sentence-final position. This results in the overall sentence having two FMs. The (20g) sentence involves only one focus marking, yet there are two copies of the verb. The movement in (20g) seems to be more complex than that of (20f). Notice that in (20g), the tense marker (F1) and one copy of the verb precede the wh-word. However, it is worth mentioning that although (20e–g) are all understood as wh-questions with predicate focusing, there are subtle semantic/pragmatic differences between them. The semantic interpretation of the focused verb

‘BEAT’ in (20e) and (20f) is different from that of (20g). This may be due to the fact that the FM immediately precedes the verbs in (20e) and (20f), which is not the case in (20g). Actually, (20g) is interpreted rather as an intensified verbal situation—that is, the second copy of the verb acts as an adverbial. Thus, (20e) and (20f) have contrastive verb-focus which seems not to be the case with (20g), and similar examples given below in (21). Also observe that in what I am terming ‘intensification verb-doubling contexts’, the second copy of the verb does not bear the infinitive marker (cf. 21), and thus the two copies are not realized the same way.

- (21) a. Lá nḗḵkíḵ wḗ ḵkíḵḗ? b. Lá ná mbén wḗ mbénḗ ḗpḗnnḗ?
 FM P2 cry who cry FM P2 dance who dance music
 ‘Who CRIED?’ ‘Who DANCED?’ or ‘who DANCED
 the dance/music?’
- c. Lá pí ntú wḗ ntú'ḗ ḵkíḵḗ? d. Lá yó tú wḗ tú'ḗ ḵkíḵḗ?
 FM P1 carry who carry water FM F1 carry who carry water
 ‘Who CARRIED the water?’ ‘Who will CARRY the water?’

An important systematic observation in Awing that is worth mentioning is how tense influences the phonology of the verb. When the tense is in the past, the verb is prefixed with a homorganic nasal which is not present when the clause is realized with a future tense marker (see (21c) and (21d)). However, I cannot currently provide a complete account of why one of the verbal copies in examples (20g) and (21) must not appear with the final schwa (ə̃). It may well be that the schwa is a residue of the infinitive particle or the entire verbal complex. Nonetheless, what is clear is that the form of the verb without the schwa is a truncated form, and it is common in Awing to truncate verbs when certain syntactic interpretations are activated (section 3.4.3 will have more to say on this). The above discussion shows the possibility of having a *wh*-expression and a focalized verb in the same sentence. We have seen a good number of examples

with the subject. It is also possible to have both subject and object questioned with verb doubling as in (22). However, recall that this is another example of ‘intensification context’, and not actually contrastive verb-focus.

- (22) Ló pén wá mbénè ká?
 FM dance who dance what
 ‘Who is DANCING what?’

We can therefore conclude our discussion on focusing by asserting that the Awing language uses mainly two ways to focalize items (ignoring prosody). Categories within the IP domain receive a contrastive-focus interpretation when preceded by the FM. This has been termed morphological marking of focus, and we have seen that more than two constituents can be focalized with this method. The second method we have come across is the morpho-syntactic means of focusing. The Awing language may use cleft-like sentences to focus any item in sentence-initial position. This section then ends with verbal focusing: when a verb is focused, the sentence ends up having two copies of the same verb. Structurally, we have seen that the second copy occurs in sentence-final position. The next section tackles interrogatives and begins with *wh*-expressions.

3 Interrogation in Awing

In this section, we will discuss the overall organisation of *wh*-questions in Awing. The section will begin with words that express *wh*-expressions such as *who*, *what*, *where*, *when*, *why* and *how*. Unlike in English where these words obligatorily move to sentence-initial position or Mandarin Chinese where *wh*-words must remain in their canonical positions (*in-situ*), Awing exhibits a mixed structure—*wh*-words can remain *in-situ* or move to sentence-initial position. When the *wh*-expressions move to sentence-initial positions, they behave exactly like cleft-like constructions. That is, the focus marker must precede the

wh-word and the latter is obligatorily followed by the invariable relative marker *pá'à* 'that'. It is also possible to have a question morpheme in sentence-final position. The question morpheme is optional and when present, the interrogative force of the entire sentence changes. Below are the wh-expressions used in Awing.

(23)	Arguments:	Referential adjuncts:	Non-Referential adjuncts:
	(ə)wá 'who'	(ə)fú 'where'	(ə)lé 'how'
	(ə)kó 'what'	(ə)ghá-kè 'when'	(ə)té-kè 'why'
		time-what	?-what

The initial vowels are in parentheses because they are seldom perceived in actual speech. The referential adjunct 'when' is a combination of the noun 'time' and the argument 'what'. Also notice that the non-referential adjunct 'how' is a combination, though the first part is not evident⁷.

3.1 Matrix wh-expressions

It is possible to have wh-expressions both in sentence-final and sentence-initial positions. Let us begin our description with the *in-situ* wh-expressions. In such cases, the realization of the FM is optional. As already mentioned, a question morpheme can also show up in sentence-final position. Consider (24) below.

- (24) a. Neh yó yí ní mǎzíà ndé màŋ
 Neh F1 come with food house my
 'Neh will bring food to my house' (declarative)

⁷ But it can be argued to have been derived from the morpheme 'because', as shown below:

- (i) m ghénə té (ngə) m kónə
 I go because that I love
 'I am leaving because I wish to.'

If this is correct, then the non-referential adjunct 'why' might be literally understood as 'because what?'

- b. Neh yó yí ní mǎzíà (lǎ) fú (lǎ)?
 Neh F1 come with food FM whereQM
 ‘Where will Neh bring the food?’

The sentence in (24b) has two optional elements: the FM and a sentence-final question morpheme (QM). When the question is uttered without any of these elements, it simply questions the direct object in (24a). When the FM is used, the questioner creates a possibility where the answer or person that answers has to choose from an implicit set of locations. The additional question morpheme changes the status of the sentence to either a soliloquy or an echo question (whether the FM is present or not). It is also possible to question more than two constituents in their base generated positions. However, when the FM precedes one of the wh-expressions, it would be infelicitous to have it precede any other wh-word. See (25) for illustration.

- (25) a. Neh yó yí ní kǎ fú?
 Neh F1 come with what where
 ‘What will Neh bring, and where?’
- b. Neh yó yí lǎ ní kǎ fú?
 Neh F1 come FM with what where
 ‘What will Neh bring, and where?’
- c. Neh yó yí ní kǎ lǎ fú?
 Neh F1 come with what FM where
 ‘What will Neh bring, and where?’
- d. *?Neh yó yí lǎ ní kǎ lǎ fú?
 Neh F1 come FM with whatFM where
 Intended: ‘What will Neh bring, and where?’

Using the FM twice is somehow redundant when constituents are questioned using wh-expressions. This is the main descriptive difference between wh-expressions and focused constituents. In the first section of this paper, we saw

that it was possible, morphologically, to focalize more than one constituent with the FM post-verbally. When it comes to *wh*-expressions, inserting the FM twice is not possible. Let us then see how *wh*-expressions behave when occurring sentence-initially.

One striking similarity between focused phrases and *wh*-expressions is seen when *wh*-expressions moves to sentence-initial position. When these expressions are preposed, they behave precisely like foci—the FM must precede the *wh*-expression and the *pá'á* ‘that’ morpheme obligatorily follows it. See examples below.

- (26) a. Ló fú pá'á Neh yó yí ni mǎzìè?
 FM where that Neh F1 come with food
 ‘Where will Neh bring the food?’
- b. Ló wé pá'á à yó yí ni mǎzìè ndé màn?
 FM who that SM F1 come with food house my
 ‘Who will bring the food to my house?’
- c. Ló kó pá'á Neh yó yí ni zérè ndé màn?
 FM what that Neh F1 come with it house my
 ‘What will Neh bring to my house?’

The examples in (26) show that there is no difference between subject, object and adjunct in the movement of *wh*-expressions. (27) further illustrates the claim that neither the relativizer *pá'á* ‘that’ nor the FM can be omitted.

- (27) a. *(Ló) fú *(pá'á) Neh yó yí ni mǎzìè?
 FM where that Neh F1 come with food
 ‘Where will Neh bring the food?’

If any *wh*-expression is used in place of the adjunct in (27), the sentence will still be ungrammatical.

3.2 Wh-expressions in embedded clauses

Embedded clauses in Awing can be introduced with predicates like *súŋà* ‘tell/say’, or *kwáŋà* ‘believe/think’. In such constellations, a wh-expression can remain in sentence-final position or move to sentence-initial position within the embedded clause. Alternatively, the wh-expression can be realized in a matrix-initial position. The examples are given in (28) below where a wh-expression can occur either in its base position (28b), or move to the initial-position of the embedded clause (28c) and even all the way to the initial-position of the matrix clause (28d).

- (28) a. Aghetse à kwáŋ ŋgá Ngwe à kóŋè Wakie
 Aghetse SM think that Ngwe SM love Wakie
 ‘Aghetse thinks that Ngwe loves Wakie’ (Declarative)
- b. Aghetse à kwáŋ ŋgá Ngwe à kóŋ(ə) (lá) wó?
 Aghetse SM think that Ngwe SM love FM who
 ‘Who does Aghetse think that Ngwe loves?’
- c. Aghetse à kwáŋ ŋgá ló wó pá’á Ngwe à kóŋè?
 Aghetse SM think that FM who that Ngwe SM love
 ‘Who does Aghetse think that Ngwe loves?’
- d. Ló wó pá’á Aghetse à kwáŋ ŋgá Ngwe à kóŋè
 FM who that Aghetse SM think that Ngwe SM love
 ‘Who does Aghetse think that Ngwe loves?’

Notice that, though the examples in (28a–d) have the same English translation, their internal syntactic structures differ in Awing. It is quite free to have these expressions in any of these positions. However, their semantic/pragmatic interpretations are not quite the same. The main difference arises when the FM in (28b) is used or left out. For the time being, I will just mention that this difference is felt as a sort of emphasis. When the FM is used, as in (28b), the emphasis is attributed in a similar manner to (28b–d).

3.3 Multiple wh-expressions

As previously mentioned, it is possible to form questions in the Awing language with more than two wh-expressions. However, it is most natural to have these expressions realized *in-situ*. In addition, multiple wh-expressions are best parsed if they are discourse-linked—that is, they should be made accessible via the immediate discourse context. (29a) gives us grounds to ask such questions.

- (29) a. Mefor à pí ntúmè ngèsáànè àmbó Ayafor mèsáànè
 Mefor SM P1 send corn to Ayafor morning
 ‘Mefor sent corn to Ayafor in the morning’
- b. Mefor à pí ntú ló ká àmbó wé ghákè?
 Mefor SM P1 send_{FM} what to who when
 ‘?What did Mefor send to who, when?’
- c. Ló ká pá’á wé pí ntúmè àmbó Tsefor mèsáànè?
 FM what that who P1 send to Tsefor morning
 ‘?What did who send to Tsefor in the morning?’
- d. Ló àmbó wé pá’á wé pí ntúmè ngèsáànè mèsáànè?
 FM to who that who P1 send corn morning
 ‘?To who(m) did who send corn in the morning?’
- e. Ló ghákè pá’á wé pí ntúmè ngèsáànè àmbó Tsefor?
 FM when that who P1 send corn to Tsefor
 ‘?When did who send a corn to Tsefor?’

In order to formulate these types of questions, the constituents which are being questioned ought to be shared by both the speaker and the listener. In example (29b), all the post-verbal wh-expressions are realised *in-situ*. The examples in (29c–e) show that any wh-expression can cross-over the wh-subject⁸. Once more

⁸ The notion of cross-over is a technical term used to describe the implausibility of the direct object or other post-verbal wh-expressions to move upward when the subject is also questioned in languages like English. It is a notion of hierarchy in multiple questioning.

I will not dive into any theoretical speculations relating to the phenomenon of cross-over violation, since that will take us beyond the scope and intention of this paper. Nonetheless, it is worth mentioning that when the *wh*-subject overtly moves as in (30b), or any *wh*-expression (cf. 30a), then no other *wh*-expression can cross-over—as demonstrated by the ungrammaticality of (30c) and (30d).

- (30) a. Aghetse à kwáŋ ngó ló kó pá'à wó pí ntúmè àmbó wó?
 Aghetse SM think that FM what that who P1 send to who
 ‘?What does Aghetse think that who sent to who?’
- b. ?Aghetse à kwáŋ ngó ló wó pá'à à pí ntúmè kó àmbó wó?
 Aghetse SM think that FM who that SM P1 send what to who
 ‘?Who does Aghetse think that (he) sent what to who when?’
- c. *Ló kó pá'à Aghetsé à kwáŋ ngó ló wó pá'à à pí ntúmè
 FM what that Aghetse SM think that FM who that SM P1 send
 àmbó wó?
 to who
- d. *Ló àmbó wó pá'à Aghetsé à kwáŋ ngó ló kó pá'à Mefor pí
 FM to who that Aghetse SM think that FM what that Mefor P1
 ntúmè?
 send

Now notice that the sentence in (30b) is not considered to be a perfect sentence in Awing. It appears that in multiple *wh*-questions, the overall interpretation of these words are easier when the *wh*-subject is *in-situ*. This is curiously unlike what we find in the literature in the descriptions of languages like English. To make the point obvious, consider example (31b) and (31c).

- (31) a. Ayafor à né nkórè ngèsáàŋè
 Ayafor SM P2 eat corn
 ‘Ayafor ate corn’

- b. ?Ló wé pá'à à nó nkórè kó?
 FM who that SM P2 eat what
 'Who ate what?'
- c. Ló kó pá'à wé nó nkórè
 FM what that who P2 eat
 '?What did who eat?'—(Instead of who ate what; in English)

Compared to English, the hierarchy is reversed in Awing—(31c) is preferred to (31b). We can therefore conclude that it is possible to have multiple wh-expression in question formation. These expressions can either remain *in-situ* or move to sentence-initial position both in matrix and embedded clauses. The movement of any post-verbal wh-expression to sentence-initial position does not matter as long as the wh-subject remains *in-situ*. However, if one of the wh-words occurs in the embedded-initial position, it creates a restriction for the other wh-expressions to successfully move to the matrix clause.

3.4 Yes/no questions

In Awing, yes/no questions can be considered neutral questions in the sense that the response can either be negative *àmàm* 'no' or positive *àm* 'yes'. Yes/no questions can be marked by a separate question morpheme *éé* or by the lengthening of some final segment. Both forms of question marking—morphological marking and segment lengthening appear in clause-final position in the overt syntax. Let us consider lengthening to be phonological marking and the separate question morpheme morphological marking. We will see that morphological marking is the dominant strategy in the sense that all cases of lengthening can be avoided or replaced with the separate question morpheme but not vice versa.

3.4.1 Lengthening in yes/no questions

Lengthening is seen as phonological marking in the sense that the last phoneme of the last morpheme is repeated or lengthened. This phenomenon affects vowels and some nasals in Awing as the following examples illustrate. I label the lengthened phoneme LP, but bear in mind that it functions as the QM.

(32)	Statements/Declarative	Questions
a.	Ngwe à lá'à kónḡ fò Ngwe SM F3 love Fon 'Ngwe shall love the Fon.'	Ngwe à lá'à kónḡ fò ó? Ngwe SM F3 love Fon LP 'Shall Ngwe love the Fon?'
b.	Ngwe à tó kúnə móm ndé Ngwe SM ASP enter inside house 'Ngwe is entering the house.'	Ngwe à tó kúnə móm ndé é? Ngwe SM ASP enter inside house LP 'Is Ngwe entering the house?'
c.	Ngwe à yó kórè mbín Ngwe SM F1 eat goat 'Ngwe will eat goat.'	Ngwe à yó kórè mbín í? Ngwe SM F1 eat goat LP 'Will Ngwe eat the goat?'

We can see from the above data that in the lengthening process, both vowels and nasals adopt/copy all the features of the preceding sound, a kind of tonal assimilation.

3.4.2 Morphological marking in yes/no questions

Yes/no questions can have a separate morpheme in sentence-final position. Thus, in all examples in (32), the LP can be replaced by a separate final question morpheme. For clarification, the questions in (32a) and (32c) are repeated below as (33a) and (33b).

(33) a.	Ngwe à lá'à kónḡ fò éé? Ngwe SM F3 love Fon QM 'Shall Ngwe love the Fon?'	b.	Ngwe a yó kórè mbín éé? Ngwe SM F1 eat goat QM 'Will Ngwe eat the goat?'
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Now, in order to corroborate the assertion made earlier concerning morphological marking dominating phonological marking, one will notice that words that end with oral stops or glottal stops and some bi-/tri-syllabic words, can be questioned with the morphological marker but not with the lengthening process as examples (34a') and (34b') illustrate.

- (34) a. Alombah à kwárè ŋkébè éé? a'. ?Alombah à kwárè ŋkébè é
 Alombah SM take money QM Alombah SM take money LP
 'Did Alombah take the money?' 'Alombah has taken the money'
- b. Alombah à kápómè tsá'è éé?
 Alombah SM P1 mould block QM
 'Did Alombah mould blocks?'
- b'. ?Alombah à ká pómè tsá'è é
 Alombah SM P1 mould block LP
 'Alombah mould the blocks.'
- c. Alombah à lá'à pómè ndé məjíŋnè éé?
 Alombah SM F3 mould house grass QM
 'Shall Alombah build a grass house?'
- d. Alombah à píjá'à ndé ni wâgè éé?
 Alombah SM P1 open house with brutality QM
 'Did Alombah open the door brutally?'

In the above examples, the QM in sentence-final position is used to type each clause as interrogative. If the speaker decides not to resort to the *éé* morpheme, and tries to lengthen the final phonemes or sounds of the last morphemes, then the sentence will simply remain declarative (cf. (34a') and (34b'), which can be systematically extended to the other examples). Therefore, any declarative sentence can be transformed into an interrogative via the use of the final question marker but not all sentences can use the lengthening technique.

3.4.3 Yes/no questions formed through short forms of words

In this section, I present another technique used by the speakers of this language to form yes/no questions, namely the shortening/truncation of words within the sentence. It is interesting to note that no question morpheme is realized overtly. The examples in (35) below show this possibility in Awing.

(35)	Declaratives	Questions/interrogatives
a.	Ngwe à kwárè ñkéèbè Ngwe SM take money 'Ngwe has taken the money'	Ngwe á kwà ñkàp? Ngwe SM take money 'Has Ngwe taken the money?'
b.	Alombah à twámè pèènnè Alombah SM carry people 'Alombah has carried the people'	Alombah à twá pi? Alombah SM carry people 'Has Alombah carried the people?'
c.	m téèmè ní èséènnè I stand with shame 'I am ashamed'	m tsí ní èsá? I stand with shame 'Am I ashamed?'
d.	?Ngwe à kwà ñkap éé? Ngwe SM take money QM	
e.	?Alombah a twá pi éé? Alombah SM carry people QM	

Examples (35a–c) show that the Awing grammar uses short forms of both the verbs and the nouns (direct object) to change the force of the clause from declarative to interrogative. However, when these short forms are used, the QM is not needed, as (35d–e) indicate. The sentences in (35d–e) are not actually ungrammatical, the final-question morpheme rather changes such sentences to soliloquies or echo questions in a similar manner to that discussed for wh-expressions with the final-question morpheme (*ló*).

3.5 Tag questions

A tag question is formed by uttering a sentence, pausing, and following up with the tag marker *kàlé* : ‘or how’, ‘not so’, ‘isn’t it’ or better still ‘is it the case’ or in French as ‘*n’est-ce pas?*’ In Awing, the response to such constructions can be *àm* ‘yes’ or *àmàm* ‘no’. A speakers may decide to add an element within the sentence that affirms the polarity of the response as negative or positive. Thus by inserting a negation morpheme, the speaker indicates a bias towards a negative answer, i.e. that (s)he expects a negative response *àmàm* ‘no’. However, his/her expectation can be counteracted, resulting in an opposite response. The following examples clarify the discussion.

- (36) a. Aghetse à pí ghénè tèsóhè kè-lé?
 Aghetse SM P1 go Bamenda TQ
 ‘Aghetse has gone to Bamenda, hasn’t she?’
- b. Fominyam à nó ηκόηè zè’kó ηwá’rè kè-lé?
 Fominyam SM P2 love teach book TQ
 ‘Fominyam had loved teaching, hadn’t he?’
- c. Fominyam a nó ké zé’kè ηwá’rè kóη pò, kè-lé?
 Fominyam SM P2 NEG teach book like NEG TQ
 ‘Fominyam had never liked teaching, has he?’

Example (36a) and (b) can be considered neutral tag questions in the sense that the speaker expects either a positive or a negative response. On the other hand, in (36c) where the speaker uses the discontinuous negation morpheme *ke...pò*, s/he expects a negative response. Nonetheless, in all three cases (36a–c), the question tag morpheme in sentence-final position scopes the entire sentence, which explains why the answer can either be positive or negative, independent of the speaker’s expectations.

3.6 Alternative question

Alternative questions are questions whose answers are derived by choosing a word or an entire clause within the question itself. In Awing, these answers can be a fragment or an entire clause. In the responses, observe that one or both of the alternative answers can occur with what we have so far considered to be the focus marker of this language. The alternatives are linked by the connective particle /kénè/ literally ‘or’ and the question ends with a question morpheme /ló/ (QM). Below are some examples.

- (37) a. Fozoh à ná nchíè ló tèsóhè kèènhè là'á-kárè ló?
 Fozoh SM P2 live FM Bemenda or village-white QM
 ‘Fozoh lived in Bamenda or overseas?’
- b. Ò lá'à kóhè mè-zè'-nè ñwárè ló fī kénè ló fé ló?
 you F3 love INF-learn-INF book FM there or FM here QM
 ‘You would love to study here or there?’
- c. Fó à ná ndzùtá ló m-á-bíñ mén tá kèènhè m-è-ñgáp mén
 Fon SM P2 kill FM PLU-goat LINK five or PLU-chicken LINK
 téré ló?
 three QM
 ‘The Fon killed five goats or three chickens?’

While examples (37a) and (b) show that a single word can be questioned, (37c) illustrates that a larger constituent can equally be questioned. In all of the examples, the morpheme *ló* introduces the alternative responses. This morpheme highlights the targeted responses somewhat and appears before the first disjunct as in (37a) and (c), or before both of them as in (37b). For simplicity, I will continue to label this morpheme as the focus marker—its function here is to direct the attention of the speaker to the alternatives.

3.7 Echo questions

Echo questions, as the word indicates, are questions which repeat (echo) a preceding statement or an answer. They are formed in the Awing language by the same strategy used in yes/no questions—that is, either by lengthening the final vowel or nasal of the last word or by adding the separate interrogative morpheme *éé*. As we proceed, it is important to know that lengthening is usually accompanied with some kind of prosodic change that affects the entire clause. (32b) is repeated below as (38), this time with an echo interpretation, as the translation indicates.

- (38) a. Ngwe á tó kúnè màm ndé
 Ngwe SM ASPenter inside house
 ‘Ngwe is getting inside the house’ (declarative)
- b. Ngwe á tó kúnè màm ndé é?
 Ngwe SM ASPenter inside house QM
 ‘Is Ngwe getting inside the house?’ (echo question)
- c. Ngwe á tó kúnè màm ndé éé?
 Ngwe SM ASPenter inside house QM
 ‘Is Ngwe getting inside the house?’ (echo question)

The repetitive (echo) question (38b) uses the lengthening strategy while (38c) uses the separate morpheme strategy just as the yes/no and other question types, the question morpheme appears syntactically in sentence-final position but scopes over the entire sentence, giving it an interrogative force.

3.8 Question formation via modal inversion

It is possible to form a question by inverting the position of the modal element in Awing, similar to the English I→C strategy—‘*Can Zamchang succeed in syntax?*’ In modal inversion, the sentence may optionally have a final question morpheme. It is important to note that what is being considered modal inversion

here is very uncommon in this language and Bantu languages in general. Actually, Awing does not display (to the best of my knowledge) any other case than the one illustrated in (39).

- (39) a. Zamchang, t́ámbo'è à ḱóhè syntaxè
 Zamchang can SM love syntax
 ‘Zamchang can love syntax’
 Or
 Actually interpreted as: ‘Zamchang, he can love syntax’
- b. T́ámbo'è Zamchang à ḱóhè syntaxè?
 can Zamchang SM love syntax
 ‘Can Zamchang love syntax?’
- c. T́ámbo'è Zamchang à ḱóhè syntaxè éé?
 can Zamchang SM love syntax QM
 ‘Can Zamchang love syntax?’

The sentence in (39a) might not actually be a typical situation of modal inversion in parallel to the English I—C strategy. The subject *Zamchang* in this example does not constitute a phonological string with the rest of the sentence, as shown with the comma—suggesting that the subject has been topicalized and as such, the modal element does not actually move in the questions in (39b) and (c) but might be in its base-generated position. However, in order not to mix up things, I leave this argument for future analysis. Finally, notice that the example in (39c) exhibits two properties: the (apparent) movement of the modal element and the final question morpheme. The presence of this question morpheme once more attributes the same interpretation that we discussed for examples (24) with a *wh*-question, and (35d–e) with the truncation process, namely rendering the sentence as an echo question or a monologue.

4 Conclusion

In this paper, I have presented the various strategies Awing speakers use to emphasize/focalize a given constituent. We have seen that focusing can be achieved morphologically and via morpho-syntactic means. In our discussion on focusing, we saw that predicate focusing is different from other constituents since the verb ends up having two copies. We then turned to a thorough description of *wh*-words. We saw that these elements could remain in their base-generated positions or move to sentence-initial positions. In sentence-initial positions, *wh*-expressions behave exactly like focused elements, when preposed. The second section dealt with the various strategies used in question formation. The overall aim of this paper, which is a refinement of (Fominyam 2012: chapter three), has been to present in a purely descriptive manner how these constructions are formed and interpreted in this language. Thus, the data can be used from any angle of linguistic inquiry for comparative or theoretical analyses.

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Henry Z. Fominyam
Universität Potsdam
Department Linguistik
Karl-Liebknecht-Str. 24-25
14476 Potsdam
Germany
fominyam.henry@yahoo.com

Sentence Type and Association with Focus in Aymara

Claudius Klose

Universität Potsdam

Sentence type marking is realized by two suffixes in Aymara, one marks declaratives and the other polar sentences (polar questions and negated sentences) by picking out one or two propositions, respectively. A third suffix, initially associated with wh-questions, turns out to be a (scalar) additive and unrelated to sentence type. The sentence-type-related suffixes associate with focus and the additive can associate with focus by attaching to the focused constituent.

Keywords: Focus, Association with Focus, Sentence Type, Aymara

1 Introduction

In the Aymara language there is a set of suffixes which, on a cursory view, seem to mark sentence type and focus simultaneously. These suffixes attach to the focused constituent and each of them seems to correspond to a sentence type. Suffix *-wa* appears in declarative sentences (1-b), *-ti* in polar questions (2-a) and *-sa* in wh-questions (1-a).

- (1) a. Jupa-x juma-n kuna-ma-**sa**?
s/he-TOP you-G/L what-2.POS-sa
'How are you related to her?'¹
- b. Jupa-x naya-n kullaka-ja-**wa**.
s/he-TOP I-G/L sister-1.POS-wa
'She is my sister.'

¹ Abbreviations used for glosses: 1,2,3,4: grammatical person; ABL: ablative; ADD: additive; ALL: allative; COM: comitative; DEM: demonstrative; EXCL: exclusive; FD: far distant; FUT: future; G/L: genitive/locative; INF: infinitive; LIM: limitative; LOC: locative; NCOMP: incomplete; ND: near distant; NMLZ: nominalizer; PAST: past; PL: plural; POS: possessive; PROG: progressive; Q: question particle; REFL: reflexive; SUB: subordinator; TOP: topic; VOC: vocative

(Yapita, 2007, 34)

- (2) a. Jupa-x juma-n kullaka-ma-ti?
 s/he-TOP you-G/L sister-2.POS-ti
 ‘Is she your sister?’
- b. Jisa, kullaka-ja-wa.
 yes sister-1.POS-wa
 ‘Yes, she is my sister.’

(Yapita, 2007, 34)

In this article, I will specify how the suffixes correlate with sentence type and that they attach to the focused constituent. I use the term sentence type in the sense of grammatical configuration of linguistic elements of a sentence. The grammatical configuration consists of the syntactic configuration of lexical and functional elements and of the prosody. A sentence type stands in a relation to a speech act. I take declarative sentences in Aymara to express assertions. Both polar questions and wh-questions express interrogative speech acts.

An analysis of *-wa*, *-ti* and *-sa* will be sketched. The suffix *-wa* singles out a proposition and thus expresses an assertion. Suffix *-ti* picks out a proposition and additionally generates the complement proposition. This accounts for the polar nature of *-ti*. The suffix *-sa* turns out to be an additive operator and does not directly influence the sentence type interpretation.

Aymara is one of the three members of the Aymaran language family spoken by two to three million people, mainly around Lake Titicaca in western Bolivia and southern Peru. Typologically, it is an agglutinating SOV language, in which the verb shows agreement with the subject and the direct object. There is no previous formal semantic work on Aymara. Unless indicated otherwise, the data is my own, elicited during field trips between 2010 and 2013.

Section 2 presents focus data in Aymara and shows that the three suffixes attach to the focused constituent. Section 3 shows the distribution of *-wa*, *-ti* and *-sa* in sentences in which they co-occur and that the suffixes interact in a systematic way. Suffix *-sa* needs closer scrutiny, therefore section 4 is devoted to inspecting

the environments it appears in and its functions. A preliminary analysis of *-wa*, *-ti* and *-sa* is given in section 5. A possible mechanism for the relation between suffixes and focus is sketched in section 6. Section 7 concludes.

2 Association with Focus

This section presents data illustrating how the suffixes under discussion attach to focused constituents. The suffixes *-wa* and *-ti* attach to whatever constituent is focused. Suffix *-sa* attaches to the *wh*-element in a question. In order to identify the focused constituents, question-answer pairs and the exclusive marker *-ki-* and the additive marker *-raki-* are used. Exclusives and additives are known to be focus associating elements across languages.

On nominal constituents the three suffixes attach after the case marker, on verbal constituents after the person agreement marker, as can be seen for *-wa* in (3). Case marking in Aymara comes in three different guises. The nominative is expressed by zero case marking, the accusative is identified by the suppression of the final vowel after the base (before the suffixes under consideration) (Adelaar, 2004, 273). All other cases are expressed by suffixes, like the allative marker *-ru*. This is exemplified in example (3). The subject *Maria* is not morphologically marked for case, the indirect object *wawaru* (to the baby) carries the allative marker *-ru-* and the direct object is identified by the absence of the final vowel, *a* of the basic form, *t'ant'a* (bread). So the morphological pattern by which case marking is realized differs between subject, direct object and indirect object.

- (3) Maria-x wawa-**ru** t'ant' chur-i-wa.
 Maria-TOP baby-ALL bread give-3-wa
 'Maria gave bread to the baby.'

Aymara has an intricate system of vowel elision. As Adelaar (2004, p. 272) notes “[s]yntactically motivated vowel suppression affects the final vowel of any

major constituent of a sentence which does not occupy the final position in that sentence.” For example, in example (3), the final vowel of the topic marker *-xa* on the subject is elided. The final vowel of the the allative marker *-ru-* is however not suppressed in this example. The dialects of Aymara differ in how frequent or obligatory these vowel elision processes are (Adelaar, 2004, footnote 61, p. 272). In the following subsection, data are presented showing subject, direct object, indirect object, adjunct, sentence, VP and verb focus.

2.1 *-sa* and *-wa*

Wh-questions in Aymara are realized by a wh-element and the suffix *-sa*. Usually the wh-element occurs in its canonical position and *-sa* attaches to the wh-element. Fronted foci are also possible and examples of that are given below. Both suffixes, *-wa* and *-sa*, are subject to the vowel elision described above. In the question-answer pairs below the marker *-sa* attaches to the wh-constituent in the question (4-a), and the marker *-wa* attaches to the corresponding constituent in the answer.

Subject focus:

For example, in (4-a), *-sa* is attached to the wh-subject *khiti-* (‘who’) and *-wa*, in (4-b), to the focused subject *Maria*.

- (4) a. *Khiti-s wawa-ru t’ant’ chur-i?*
 who-sa baby-ALL bread give-3
 ‘Who gave the bread to the baby?’
- b. *Maria-w wawa-r t’ant’ chur-i.*
 Maria-wa baby-ALL bread give-3
 ‘*Maria* gave bread to the baby.’

In (5-b) *-wa* attaches to the focused subject right after the exclusive particle *-ki-*.

- (5) a. *Carlos-amp Maria-mpe-x vacaciona-r sara-sik-i.*
 Carlos-COM Maria-COM-TOP vacation-ALL go-PROG-3

‘Carlos and Maria are going on vacation.’

- b. Jani-wa! Carlota-ki-w sara-sk-i.
 No-wa Carlos-EXCL-wa go-PROG-3
 ‘No! Only Carlos is going.’

Direct object focus: Suffix *-sa* attaches to the wh-element in question (6-a). Suffix *-wa* doesn’t appear attached to the base of the direct object in (6-b). The minimal pair carrying *-wa* on the direct object is ungrammatical (6-c). Various authors assume a zero allomorph of *-wa* in this case, among them Hardman et al. (1988). Another option would be to assume that *-wa* is erased in the same process as the vowel.

- (6) a. Maria-x wawa-ru kun-s chur-i?
 Maria-TOP baby-ALL what-sa give-3.
 ‘What did Maria give to the baby?’
- b. Maria-x wawa-r t’ant’ chur-i.
 Maria-TOP baby-ALL bread give-3.
 ‘Maria gave *bread* to the baby.’
- c. *Maria-x wawa-r t’ant’-wa chur-i.
 Maria-TOP baby-ALL bread-wa give-3.
 ‘Maria gave *bread* to the baby.’

Constituent answers containing *-wa* on the direct object are possible (7-b). Fronting of the direct object is possible (7-c) but even then the direct object may not carry *-wa* (7-d).²

² The decisive factor for elision seems to be the position with respect to the verb. Cerrón-Palomino (2000) presents examples of fronted verbs in which the direct object does not lose its final vowel and carries *-wa*.

- (i) Mun-ta t’ant’a-wa.
 want-1 bread-wa
 ‘I *want* bread.’

Briggs (1993, 142) also gives examples of a zero complement (the direct object) which follows the verb which is marked by *-wa*.

- (7) a. Maria-x wawa-ru kun-s chur-i?
 Maria-TOP baby-ALL what-sa give-3.
 ‘What did Maria give to the baby?’
- b. T’ant’-wa.
 bread-wa
 ‘Bread.’
- c. T’ant’ Maria-x wawa-r chur-i.
 bread Maria-TOP baby-ALL give-3
 ‘Maria gave *bread* to the baby.’
- d. *T’ant’a-w Maria-x wawa-r chur-i.
 bread-wa Maria-TOP baby-ALL give-3
 ‘Maria gave *bread* to the baby.’

If another suffix like the commitative marker *-mpi-* in (8-a) intervenes between the base and *-wa*, *-wa* can appear on the direct object. The same holds if instead of *-mpi-* the exclusive marker *-ki-* intervenes (8-b).

- (8) a. Juana-x manzana-mp poqota-mpi-w al-i.
 Juana-TOP apple-COM banana-COM-wa buy-3
 ‘Juana bought an apple and a banana.’
- b. Jani-wa! Poqota-ki-w al-i.
 No-wa Banana-EXCL-wa buy-3
 ‘No! She just bought a banana.’

Indirect object focus: In (9-a), *-sa* attaches to the wh-element and *-wa* attaches to the indirect object. Both follow the allative case marker *-ru-* (9-b).

- (9) a. Maria-x khiti-ru-s t’ant’ chur-i?
 Maria-TOP who-ALL-sa bread give-3
-
- (ii) Na-x suy-t’a-sk-ta jicha-x chacha-j-wa.
 I-TOP wait-?-PROG-1 now-TOP husband-1.POS-wa
 ‘I am waiting for my husband.’

In the case above, it is the vowel of the subject which is suppressed. The subject directly precedes the verb. This hints at a syntactic or phonological explanation for the vowel reduction.

‘To whom did Maria give the bread?’

- b. Maria-x wawa-ru-w t’ant’ chur-i.
 Maria-TOP baby-ALL-wa bread give-3
 ‘Maria gave bread *to the baby*.’

Adjunct focus: Suffix *-sa* attaches to the wh-adjunct in the question (10-a) and *-wa* attaches to the temporal adjunct in sentence (10-b).

- (10) a. Kuna-pacha-kama-**sa** La Paz marka-n-k-äta?
 what-time-LIM-sa La Paz place-G/L-NCOMP-2.FUT
 ‘Until when will you be in La Paz?’
- b. Phisi semana-mpi-**w** La Paz marka-n-k-ä
 five week-COM-wa La Paz place-G/L-NCOMP-1.FUT
 ‘I will be in La Paz for five weeks.’

The exclusive in (11-b) attaches to the adjunct *jichuru* (today), and *-wa* to the exclusive.

- (11) a. Kuna ur-kama-**sa** aka-n-k-äta?
 what day-LIM-sa here-G/L-NCOMP-2.FUT
 ‘Until what day will you be here?’
- b. Jichhuru-ki-**w** aka-n-k-ä
 today-EXCL-wa here-G/L-NCOMP-1.FUT
 ‘I will be here only today.’

Sentence focus: The suffix *-sa* in (12-a) attaches to sentence-final verbalized wh-element. The verbalization can be seen by the wh-element carrying the second person singular agreement marker *-ta*. In (12-b), *-wa* attaches to the verbalized spatial adverb.

- (12) a. Kawki-n-ta-**sa**
 where-G/L-2-sa
 ‘Where are you?’

- b. Uta-ja-n-k-t-**wa**.
 house-1.POS-G/L-NCOMP-1-wa
 ‘I am at home.’

In the second part of (13), the additive *-raki* and *-wa* attach to the verb. This constitutes a case of VP focus or possibly sentence focus.

- (13) Jani-wa futbola-ki-t gust-k-i-ti, challwa katu-ña
 no-wa football-EXCL-ABL like-NCOMPL-3-ti fish fish-INF
 gusta-raki-**wa**.
 like-ADD-wa
 ‘He doesn’t only like football, he also likes fishing.’

VP: The data below show the additive *-raki* and *-wa* attaching to a VP embedded under *sari* (‘going’). In (14-b) *-wa* attaches to the same constituent as the additive marker, to *fishing*. This contrasts with *futbola* (football) in the preceding question, which is marked by the exclusive and *-ti*, by indicating that there is another activity besides playing football which Juan pursues.

- (14) a. Kuna-s Juana-n lurä-wi-pa-xa? Futbola-ki-t anat-i?
 what-sa Juan-G/L do-NMLZ-3.POS-TOP Football-EXCL-ti play-3
 ‘What does Juan do? Does he only play football?’
 b. Jani-wa! Challwa katu-ri-raki-**w** sar-i.
 No-wa fish catch-NMLZ-ADD-wa go-3
 ‘No, he also goes fishing.’

Verb: In (15-b) *-wa* attaches to the verb which is marked by the exclusive.

- (15) a. Maria-sti mä moxsat’ant’ lur-i, ukat moxsat’ant’ manq’-as-i.
 Maria-sti one sweet:bread make-3, then sweet:bread eat-REFL-3
 ‘Maria made a sweetbread and then she ate a sweetbread.’
 b. Jani-w lur-k-i-ti! Manq’a-k-i-**wa**.
 no-wa make-NCOMP-3-ti eat-EXCL-3-wa
 ‘She didn’t make it! She just ate it.’

2.2 -ti

Suffix *-ti* can attach to focused subjects, direct and indirect objects and focused sentences/verbs. It can also attach to the negation particle *jani-*.

Subject focus: In the polar question (16-a) suffix *-ti* attaches to the subject. The affirmative constituent answer (16-b) consists of the subject *Maria* marked by *-wa*. The negative short answer consists of the negation particle marked by *-wa* and the verbalized subject *Maria* carrying the incompletive marker, person agreement marker and *-ti*.

- (16) a. Mariya-**t** wawa-r t'ant' chur-i.
 Maria-ti baby-ALL bread give.3
 'Did *Maria* give bread to the baby?'
- b. Mariya-**wa**.
 Maria-wa
 '(Yes,) it was *Maria*.'
- c. Jani-w Mariya-**k-i-ti**.
 no-wa Maria-NCOMP-3-ti
 'No, it was not *Maria*.'

(Hardman, 2001, p. 174)

Direct object focus: In the polar question (17-a), *-ti* attaches to the direct object. The affirmative constituent answer (17-b) consists of the direct object from the question, *t'ant'* marked by *-wa*. In the negative constituent answer *t'ant'* is marked by *-ti* (17-c).

- (17) a. Maria-x wawa-r t'ant'-**t** chur-i.
 Maria-TOP baby-ALL bread-ti give-3
 'Did *Maria* give *bread* to the baby?'
- b. T'ant'-**wa**.
 bread-wa
 'Yes, *bread*.'

- c. Jani-w t'ant'-**ti**.
no-wa bread-ti
'No, not bread.'

(Hardman, 2001, p. 174)

Indirect Object: Suffix *-ti* in (18-a) attaches to the indirect object.

- (18) a. Maria-x wawa-ru-**t** t'ant' chur-i.
Maria-TOP baby-ALL-ti bread give.3
'Did Maria give some bread *to the baby*?'
b. Wawa-ru-**wa**.
baby-ALL-wa
'Yes, to the baby.'
c. Jani-w wawa-ru-**ti**.
no-wa baby-ALL-ti
'No, not to the baby.'

(Hardman, 2001, p. 174)

Sentence focus: In (19-a) *-ti* attaches to the verb in sentence-final position. Since the default position for verbs is sentence final, the example could also constitute a verb or VP focus in an appropriate context.

- (19) a. Masuru-x uta-ma-n-ka-yäta-**ti**?
yesterday-TOP house-2.POS-G/L-NCOMP-2.ND-ti
'Have you been at home yesterday?'
b. Jisa, uta-ja-n-ka-yät-wa, luza-t jut-i.
yes, house-1-POS-G/L-NCOMP-1.ND-wa, light-ABL come-3
'Yes, I was at home, the guy from the electricity company came by.'

Negation particle: In the following question-answer pair *-ti* attaches to the negation particle in the question (20-a) and *-wa* to the negation particle in the corresponding answer (20-b).

- (20) a. Jani-**t** awt al-k-ta.
 not-ti car buy-NCOMP-2
 ‘Didn’t you buy a car?’
- b. Jani-**wa**.
 no-wa
 ‘No.’

(Yapita, 2007, 58)

2.3 Section conclusion

This section presented data illustrating that *-wa*, *-ti* and *-sa* attach to focused subjects, direct objects, indirect objects and sentences. *-wa* and *-sa* were shown to also attach to focused adjuncts, VPs and verbs. *-ti* also attaches to the negation particle. The presented data showed that the three suffixes attach to focus. It remains to be shown whether the attachment to focus is obligatory. For that, negative evidence is required, which shows that if focus and one of the suffixes mark different constituents, the sentence is ungrammatical. This I have to leave to future work.

As Andreas Haida (p.c.) pointed out to me, the suffixes are not focus markers themselves but associate with focus. Evidence for that is that elements which associate with focus, like exclusives, attach to the base of the constituent, before *-wa*, *-sa* or *-ti*. If *-wa*, *-sa* or *-ti* were focus markers, the focus-sensitive exclusive had to attach to them and not the other way around (21).

- (21) Carl^osa-ki-**w** sara-sk-i.
 Carlos-EXCL-wa go-PROG-3
 ‘Only Carlos is going.’

Data suggesting that it is not even obligatory for all of the three suffixes to attach to focus is presented in the following section. Sentences containing two or even three of the suffixes are unlikely to be cases of double or triple focus. But an explicit context is required for these sentences in order to locate the focus. That

is also left to future work.

3 Sentence Type Marking

This section presents data on *-wa*, *-ti* and *-sa* illustrating their linguistic behaviour and their interaction with each other with respect to the sentence type. This additional data will serve as basis for the elaboration of their respective meanings in section 5.

Sentences containing multiple of the suffixes under consideration make clear that there cannot be a simple one-to-one relation between suffix and sentence type because that would result in a conflict between multiple sentence types. For example, all three suffixes co-occur together in (22) below. Note that the three occurrences of *-wa*, *-ti* and *-sa* most likely do not indicate that (22) is an instance of triple focus, although closer scrutiny is required to settle this question.

- (22) Jani-**w** makina-s kuna-s utja-p-k-itu-**ti**.
 not-wa machine-4.POS what-sa exist-PL-NCOMP-3>1-ti
 ‘We don’t have any kind of machine.’

(Hardman, 2001, 177)

Is there a principled way in which a combination of the suffixes stands to sentence type? All possible combinations of the suffixes are found, all three together, *-wa* and *-ti* together, *-wa* and *-sa* together and *-ti* and *-sa* together. A pattern is observable.

Suffix *-wa* always takes widest scope and gives rise to declarative sentences no matter which other suffixes occur in the sentence. In (22), *-wa* scopes over *-ti* and *-sa*. In the negative declarative sentence (23), *-wa* takes scope over *-ti*. Suffix *-wa* attached to the negation particle *jani-* in (24) takes scope over *-sa* which is attached to a wh-element.

(23) Maria-x jani-w wawa-r t'ant' chur-k-i-ti.
 Maria-TOP not-wa baby-ALL bread give-NCOMP-3-ti
 'Maria didn't give bread to the baby.'

(24) Jani-w kamach-k-i-sa.
 not-wa what.to.do-NCOMP-3-sa
 'S/he did nothing.'

(Hardman, 2001, 189)

Suffix *-ti* in a sentence without *-wa* takes scope over *-sa* (25) giving rise to a polar question.

(25) Juma-x jupa-ru-x kun-s chur-ta-ti.
 you-TOP s/he-ALL-TOP what-sa give-2-ti
 'Did you give her anything?'

(Hardman, 2001, 184)

The pattern which arises from this data is that *-wa* always takes widest scope marking a sentence as declarative, *-ti* takes scope over *-sa*, marking the sentence as a polar interrogative question and *-sa* takes narrowest scope.

4 *-sa*

In order derive the meaning of *-sa*, we need to look at it in more detail, since it occurs in all sentence types. Contrary to its first appearance, I claim that *-sa* is not a question marker, but a (scalar) additive operator.³ Additive operators are known to associate with focus across languages. The additive use is illustrated in (26) and the scalar additive use in (27).

³ Here I don't decide whether *-sa* is an additive, like the English 'also' or a scalar additive, like 'even'. For the present purpose this is not of importance.

- (26) Jupa-x saku-s pantaluna-s, uka-nak ch'uku-sk-i.
 s/he-TOP jackets-sa trousers-sa DEM-PL sew-PROG-3
 'He is sewing jackets, trousers, all of that.'

(Yapita, 2007, p. 125)

- (27) Uka-naka-x wiyka-tayn lluqalla-naka-rak isti ch'aka-nak-s.
 that-PL-TOP burn-3.FD boy-PL-ADD this bones-PL-sa
 'The boys burn[ed] this, too, (they cleaned) even the bones.'

(Coler, 2010, p. 385)

In a variety of languages, (scalar) additives combine with interrogatives to form indefinite pronouns (Haspelmath, 1997, p. 157). In section 3 with example (22), (24) and (25) we have observed that *-sa*, attached to *kuna*, serves an indefinite expression. Indefinites and interrogative pronouns are closely related in various languages. Haspelmath takes interrogative pronouns to be the basic form and derives the indefinite by attachment of an additive operator. Haida on the other hand considers “the identity of indefinite and interrogative pronouns as the basic phenomenon” (Haida, 2008, p. 48). As a *wh*-element is morphologically identical to the indefinite in Aymara (interrogative-indefinite + *-sa*), I opt for Haida’s identity assumption and consider *kuna* and its kin to be indefinite-interrogative pronouns. Aymara basic indefinite-interrogatives are listed in table 1. There are other indefinite-interrogatives, but they are formed by one of the basic indefinite-interrogatives and other elements, like the Aymara equivalent to the English ‘when’ in (28).

<i>kuna</i>	what
<i>khiti</i>	who
<i>kawki</i>	where
<i>qawqha</i>	how much

Table 1: indefinite-interrogatives in Aymara

- (28) kuna-pacha
 what-time/space
 ‘when’

With respect to sentence type, I assume that *-sa* does not play a role. The interrogative function of a sentence in Aymara derives from the absence of the suffix *-wa*. A sentence not containing any of the three suffixes loses some of its illocutionary force. The paraphrases of the following minimal pair in (29) and (30) show this, and also the paraphrase of (31).

- (29) Naya-x sar-ä-wa.
 I-TOP go-1.FUT-wa
 ‘I will go.’
- (30) Naya-x sar-ä-xa.
 I-TOP go-1.FUT-TOP
 ‘I will go, I guess. All right?’

(Hardman et al., 1988, p. 280)

- (31) Ch’armanti-x juma-x-ay iskuyla-r jut-ta-xa.
 this.morning-TOP you-TOP-VOC school-ALL come-2-TOP
 ‘This morning (it was) you (who) came to school (right?).’

(Hardman, 2001, p. 171)

From that I conclude that the interrogative force is not due to the presence of these suffixes, but to the absence of one, and is further strengthened by elements which induce alternatives, like focus and/or indefinites.

A *wh*-question in Aymara, as far as I can see, has two licensing conditions. First, it must not contain *-wa* or *-ti* and second, it must contain a (focused) indefinite-interrogative pronoun. We have seen evidence for the first condition in section 3. Sentences containing *-wa* or *-ti* never served as *wh*-questions. The second condition is based on the observation that all *wh*-questions we have seen (and I am aware of) contain an indefinite-interrogative pronoun. A further assump-

tion I make is that the indefinite-interrogative pronoun in a wh-question must be focused. Haida (2008, p. 48-52) gives examples in Lakhota, Korean and German in which an interrogative sentence containing an indefinite-interrogative pronoun serves as constituent question if the pronoun is focused. The following example is from Korean. If the indefinite *nwu(kwu)* is stressed, it is interpreted as a wh-element, as indicated by the paraphrase in (32-b), if unstressed, it is interpreted as indefinite (32-a).

- (32) *nwu(kwu)-ka* *pakkey w-ass-ni?*
 someone/who-SUB outside come-PAST-Q
 a. ‘Is there someone at the door?’
 b. ‘Who is at the door?’

(Haida, 2008, p. 50)

In German, the same double use of indefinite-interrogative is observable. If the indefinite-interrogative pronoun *was* is stressed, sentence (33) is a double wh-question, as the paraphrase in (33-b) indicates, if unstressed, only reading (33-a) is available.

- (33) *Wer hat was* *gekauft?*
 who has something/what bought
 a. ‘Who bought something?’
 b. ‘Who bought what?’

(Haida, 2008, p. 52)

The data in section 2 showed that the indefinite-interrogative pronoun in a wh-question in Aymara is focused. In the polar question (34-a), the indefinite-interrogative pronoun on the other hand is not focused and is interpreted as indefinite. The example also shows the more general fact that *-sa* does not always attach to the focused constituent, as it is not the indefinite which is focused in the question-answer pair in (34).

- (34) a. Juma-x jupa-ru-x kun-s chur-ta-ti.
 you-TOP s/he-ALL-TOP what-sa give-2-ti
 ‘Did you give her anything?’
- b. Naya-x jupa-ru-x kun-s chur-t-wa.
 I-TOP s/he-ALL-TOP what-sa give-1-wa
 ‘I gave her anything/something.’

(Hardman, 2001, 184)

The data presented above are compatible with the assumption that an indefinite-interrogative pronoun needs to be focused in order for the sentence to serve as wh-question, but negative evidence is required to settle the question conclusively.

In this section we have seen that *-sa* is a (scalar) additive which can attach to an indefinite-interrogative pronoun. Furthermore, *-sa* often attaches to the focused constituent, but it need not, especially in the presence of other suffixes, which also associate with focus. With respect to sentence type, we have seen that it does not play a role, but that it is the absence of *-wa* and *-ti* which mark a sentence as interrogative. The absence of a sentence-type-marking suffix and the presence of a focused indefinite-interrogative is what is required in Aymara to form a wh-question.

5 Proposal for the meaning of *-wa*, *-ti* & *-sa*

In this section I sketch preliminary meanings for *-wa*, *-ti* and *-sa*, taking into account the data presented in sections 2, 3 and 4. All suffixes are focus sensitive and attach to the focused constituent if only a single suffix occurs in a sentence. Suffix *-wa* yields a proposition (a set of possible worlds), the meaning usually associated with an assertion. Suffix *-ti*, when applied to a proposition, yields a two-element set of propositions. It picks out a proposition and generates its complement proposition. Suffix *-sa* is an additive operator. With respect to sentence type marking, it does not have function.

5.1 -wa

Concerning *-wa* so far we have seen that it takes scope over the other two suffixes and marks the sentence as declarative. Therefore, I take the meaning of a sentence containing *-wa* to be a proposition, a set of possible worlds. *-wa* picks out the set of possible worlds which are true in the evaluation world. This is illustrated for a declarative sentence (35).

Declarative Sentence:

- (35) Sar-t-wa.
 go-1-wa
 'I went.'

p : I went

$-wa(p) : \{p\}$

$-wa(p)$ yields a single proposition.

5.2 -ti

There are two uses of *-ti*. As seen above, *-ti* appears in polar questions, cf. (25), and in a corresponding negative answer to a polar question, a negative declarative sentence. Here it co-occurs with *-wa*. Considering this data, it appears that *-ti* induces polarity.

The meaning of a question is the set of possible answers (Hamblin, 1958), thus it is a set of sets of possible worlds. And a polar question divides the set of possible worlds into two sets, the set in which p is true and the set in which p is not true. This is what I propose that *-ti* does. It divides the possible worlds into two non-overlapping sets. Below, this will be represented by proposition p and its complement proposition ($W \setminus p$). This set of sets is polarized, i.e. one of the two sets (the affirmative one) is more prominent than the other, since a positive answer to a polar question refers to one of the two propositions and not the other.

A negative answer, in contrast, makes the other proposition more prominent. I don't give more details to how this prominence works, but Roelofsen and van Gool (2010) model this by *highlighting*. They assume the meaning of a question consists of two components, the proposal-set and the highlight-set (Roelofsen and van Gool, 2010, p. 389). The second set, the highlight-set models what I call the prominent answer.

A negative declarative sentence, the second environment in which *-ti* appears, additionally contains the suffix *-wa*. The suffix *-ti* divides the possible worlds and yields a (polarized) set of propositions. Then, suffix *-wa* picks out the prominent proposition and yields a single proposition. In the following, the composition of meaning for *-ti* and *-wa* is exemplified for polar questions and negative declarative sentences.

Polar Question:

- (36) Sar-ta-ti?
 go-2-ti
 'Did you go?'

p = you went

W = set of all possible worlds

$W \setminus p$ = the complement of p in W

$-ti(p)$: $\{p, W \setminus p\}$

Suffix *-ti*, applied to a proposition, yields a set of mutually exclusive propositions, the meaning of a polar question.

Negative Declarative:

- (37) Jani-w sar-k-t-ti.
 no-wa go-NCOMP-1-ti

‘I didn’t go.’

$p = \text{I didn't go}$

$-ti(p): \{p, W \setminus p\}$

$-wa(-ti(p)): \{p\}$

Suffix *-ti* yields a set of two propositions and *-wa* picks out the prominent proposition, which results in a desired proposition, p (‘I didn’t go.’).

5.3 -sa

Suffix *-sa* is a (scalar) additive. Therefore it can and does appear in all sentence types, since it does not directly affect the formation of a particular sentence type. Additives merely introduce the presupposition that the predicate which holds for the focused constituent also holds for an alternative of the focused constituent. An additive does not contribute any truth-conditional meaning. Koch and Zimmermann (2010) capture this insight by representing the denotation of an additive by the identity function.

Wh-questions in Aymara arise in the absence of *-wa* and *-ti* and in the presence of a focused indefinite-interrogative. Focus in Aymara, in the absence of a suffix which structures the proposition, leads to the interpretation as a wh-question. The meaning of wh-questions is identified with the set of possible answers (Hamblin, 1958). This set corresponds to the set of focus alternatives. Focus in Alternative Semantics (Rooth, 1992) contributes a second layer of meaning, the focus meaning. These alternative propositions differ in the value of the focused constituent. The alternative values of the focused constituent range over the set of denotations of the semantic type of the focused constituent.

The focus alternatives directly act as sets of propositions which make up the denotation of a wh-question. This is illustrated below for (38).

Wh-Question:

- (38) Khiti-s sar-i
 who-sa go-3
 ‘Who went?’

p = somebody went

$$\begin{aligned} \llbracket (38) \rrbracket^o &= \{p: \exists x[\text{human}(x)(w) \ \& \ p = \lambda w'.\text{went}(x)(w')]\} \\ \llbracket (38) \rrbracket^{Foc} &= \{p: \exists x[\text{human}(x)(w) \ \& \ p = \lambda w'.\text{went}(x)(w')], \\ &\quad p: \exists y[\text{human}(y)(w) \ \& \ p' = \lambda w'.\text{went}(y)(w')], \\ &\quad p: \exists z[\text{human}(z)(w) \ \& \ p = \lambda w'.\text{went}(z)(w')]\} \end{aligned}$$

$\llbracket \rrbracket^o$ is the ordinary interpretation function and $\llbracket \rrbracket^{Foc}$ is the focus interpretation function which yields all the focus alternatives. When it is not further restricted by *-wa* or *-ti*, $\llbracket (38) \rrbracket^{Foc}$ yields the final output which is a set of possible answers. Under this account, the presence of *-sa* in a wh-question is not necessary, since the communicative function of a wh-question is carried by the interaction of indefinite-interrogative and focus. If that is right, a wh-question should also be possible in the absence of *-sa* and only requires the absence of one of the suffixes under consideration and the presence of a focused constituent. This remains to be shown.

6 Discussion

Here I want to outline a possible mechanism by which the three suffixes under discussion associate with focus. The three suffixes do not necessarily associate with focus. They all carry a focus-checking feature. This feature can but need not check the focus feature of the focused constituent. The focus feature of the focused constituent on the other hand must be checked, but only once. This feature checking requirement triggers the movement and attachment to the

focused constituent of one of the suffixes under discussion. The suffixes are base-generated in sentence-final position. The order in which the suffixes are targeted by the checking requirement is first *-wa*, second *-ti* and last *-sa*. Multiple foci would result in multiple moved suffixes, provided that the sentence contains multiple suffixes. The feature checking mechanism must be able to explain multiple foci for simple declarative sentences (containing just one suffix, *-wa*). What checks the second focus feature and saves the derivation from crashing? We have seen that *-sa* does not always attach to the focused constituent. The movement and attachment to the (unfocused) indefinite-interrogative in example (34) of section 4 needs to be explained. This could be a more general requirement for *-sa* to attach to alternative inducing elements like indefinites, focus or listings/additive meanings.

7 Conclusion

The focus marking and sentence type indicating function of the Aymara suffixes *-wa*, *-sa* and *-ti* was examined. The suffixes don't mark focus, but associate with focus. When occurring alone, each of the suffixes attaches to the focused constituent. This was shown by the use of question-answer pairs and focus-associating elements like exclusives and additives. For focus-association of the three suffixes, a tentative explanation in terms of feature checking was discussed.

Suffix *-wa* was identified to mark declarative sentences by picking out a single proposition as the meaning of a sentence which contains *-wa*. *-ti* marks polar questions and, together with *-wa*, negative declarative sentences. This is explained by its two-proposition yielding denotation. It picks out a proposition and the corresponding complement proposition. Suffix *-sa* does not influence the sentence type. It is a (scalar) additive. A wh-question, in which *-sa* typically occurs, arises by the absence of one of the other two suffixes and a focused indefinite-interrogative pronoun. Without the proposition-restricting function of

of *-wa* and *-ti* the focus alternatives directly contribute the set of possible answers.

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Claudius Klose
Universität Potsdam
SFB 632 “Informationsstruktur”
Karl-Liebknecht-Strasse 24/25
14476 Golm
Germany
cklose@uni-potsdam.de

Empirical investigation of focus and exhaustivity in Akan*

Simone Pfeil Susanne Genzel Frank Kügler

University of Potsdam

It has been observed for many African languages that focussed subjects have to appear outside of their syntactic base position, as opposed to focussed objects, which can remain in-situ. This is known as subject-object asymmetry of focus marking, which Fiedler et al. (2010) claim to hold also for Akan. Genzel (2013), on the other hand, argues that Akan does not exhibit a subject-object focus asymmetry. A questionnaire study and a production experiment were carried out to investigate whether focussed subjects may indeed be realized in-situ in Akan. The results suggest that (i) focussed subjects do not have to be obligatorily realized ex-situ, and that (ii) the syntactic preference for the realization of a focussed subject highly depends on exhaustivity.

Keywords: Akan, focus, subjects, exhaustivity, in-situ

1 Introduction

Many African languages of the Gur, Kwa, and (West) Chadic language groups as well as Bantu languages display a so called subject-object asymmetry of focus marking (Fiedler and Schwarz, 2005; Fiedler et al., 2010; Marfo and Bodomo, 2005; Zerbian, 2007). This asymmetry relates to the observation that focussed subjects need to be overtly marked syntactically, whereas focussed ob-

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jects need not.¹ In this article, we investigate whether focussed subjects in Akan can remain syntactically unmarked.

Akan, a Kwa language of the Niger-Congo phylum, is one of the major languages of Ghana. It is spoken in the central and southern parts of Ghana by over 8.3 million people (Lewis, 2009). Akan comprises the three main dialects Akuapem Twi, Fante and Asante Twi. The present article deals with Asante Twi, for which we will use the term Akan throughout. Furthermore, Akan is a tone language that distinguishes between a High and a Low tone (Dolphyne, 1988). Its unmarked word order is SVO (Boadi, 1974; Saah, 1994) and it displays “head-initial characteristics” (Aboh, 2010; Boadi, 2005; Kobele and Torrence, 2006, 162), which means that nouns precede adjectives, determiners, and numerals, see (1).²

- (1) Kontromfi no tua dua kakraa futufutu.
 monkey DET possess.PRS tail huge fluffy
 ‘The monkey has a huge fluffy tail.’

(Genzel, 2013, 8)

Focus highlights “the part of an answer that corresponds to the wh-part of a constituent question” (Krifka, 2007, 22). Krifka further notes that “[o]ther pragmatic uses of focus are to correct and confirm information.” (p. 23). In this case, an antecedent in the previous discourse is corrected, and thus the corrected constituent is in focus. In Akan, a focussed constituent can appear either in-situ or ex-situ, cf. (2).³ While in-situ focus has not attracted much attention in the

¹ Frequently, the term subject / non-subject asymmetry is used, since this asymmetry generally concerns subjects and non-subjects (i.e. objects, adverbials and verbs). Throughout the article, we will use the term subject-object asymmetry.

² All examples are glossed according to the Leipzig Glossing Rules (Comrie et al., 2008). The following glosses are used: ANI = animate, DET = determiner, DITRANS = ditransitivity marker, FM = focus marker, INA = inanimate, OBJ = object, PL = plural, PRS = present tense, PST = past tense, SG = singular, SUBJ = subject, TM = terminal marker.

³ Both constructions are also used for question formation in Akan (Saah, 1988).

literature, except for similarities in syntactic marking with *wh*-question (Saah, 1988; Kobele and Torrence, 2006), a huge body of research is concerned with the *ex-situ* focus construction (e.g. Schachter and Fromkin, 1968; Schachter, 1973; Boadi, 1974; Saah, 1988; Kobele and Torrence, 2006; Amfo, 2010; Ofori, 2011). As a consequence, we did not find any examples in the literature that contrast *in-situ* and *ex-situ* focus in the same context. To illustrate that focus in answers to the same question/context can either appear *in-situ* or *ex-situ*, we use realizations of object focus chosen from a corpus, which was elicited with a situation description task (Genzel and Kügler, 2010). The example is presented in (2). The question suggests that the person asking believes that *Anum bought salty fish*. The respondent, however, knows that it was not *salty fish* but *mango* that *Anum bought*. Thus, the object is corrected by the responder and the corrected object is in focus. If the object (*a*)*mango* is focussed *in-situ*, the word order of the sentence is maintained and the focussed element stays in its base position (Saah, 1988, 1994; Ermisch, 2006), see (2-A1).⁴ If the focussed object (*a*)*mango* is realized *ex-situ*, the focussed element is moved to the sentence initial position and the morpheme *na* is inserted to its right, cf. (2-A2).

(2) Q: Did Anum buy salty fish this morning?

A1: Daabi. Anum tɔ-ɔ AMANGO anɔpa yi.
No. Anum buy-PST mango morning this
'No. Anum bought a MANGO this morning.'

A2: Daabi. MANGO_i na Anum tɔ-ɔ no_i anɔpa yi.
No. mango FM Anum buy-PST 3.SG.OBJ.INA morning this
'No. It is a MANGO that Anum bought this morning.'

(Genzel and Kügler, 2010, 98, 97)

Na has been described as a focus marker (e.g. Boadi, 1974; Saah, 1988; Amfo, 2010; Ofori, 2011). Boadi (1974, 7) analyses it as an exclusive focus marker: "*na* narrows down the referential range of the constituent [...] and places it in

⁴ In all examples, the focussed constituent is indicated by capital letters.

an exclusive class by itself, thus bringing this constituent into sharp contrast with all other members of the paradigm.” The *ex-situ* structure is assumed to be a cleft-construction (Kobele and Torrence, 2006), which is corroborated by the fact that $\varepsilon\text{-y}\varepsilon$ (‘it is’) may precede the fronted element. In contrast to *in-situ* focus, the *ex-situ* construction is also assumed to convey an exhaustive interpretation of focus (Ermisch, 2006; Saah, 1988). Consequently, the construction in (2-A2) expresses that Anum bought nothing else but mango. A resumptive pronoun may be inserted at the base position of the focussed object. This is illustrated by co-indexation of *mango* and *no* in (2-A2). If the fronted focus constituent is a subject, the resumptive pronoun is obligatory (e.g. Ameka, 2010). Dolphyne (1988, 90) makes two important observations with respect to resumptive pronouns and morphological focus marking, which will be relevant in the remainder of this paper. First, if the fronted element is an animate singular or plural subject, speakers of Asante Twi may use the inanimate singular form ε - instead of the regular animate form ɔ - as resumptive pronoun. Second, *na* may be realized as *ne/nε* if it is followed by the inanimate coreferent pronoun ε .⁵ Dolphyne (1988, 90) notes that this pronunciation of the focus marker is an assimilation of the focus marker *na* with the inanimate pronoun ε .

According to Fiedler et al. (2010), focus marking in Akan exhibits a subject-object asymmetry, as it only allows focussed objects to be unmarked, cf. (2-A1). In other words, only objects, more specifically non-subjects, may appear *in-situ*. Focussed subjects, on the other hand, are required to be overtly marked, which means that they can only be focussed *ex-situ*. Genzel (2013), however, contradicts this view and claims that focussed subjects and focussed objects can be realized *ex-situ* and *in-situ* and that, consequently, Akan does not exhibit a subject-object asymmetry of focus marking. Her claim is supported by evidence from Duah (2014), who suggests that focussed subjects have to be realized *in-*

⁵ Note that Akan exhibits vowel harmony (Stewart, 1967; Clements, 1985; Dolphyne, 1988), and in particular a process of regressive [+ATR] vowel harmony across word boundaries (Dolphyne, 1988; Kügler, 2015), which causes the alternation of $e \sim \varepsilon$ on the focus marker.

situ if the focussed constituent has a non-exhaustive interpretation. This is illustrated in (3). The context in (3) triggers the expectation that more than one person attended the funeral. A realisation in which the focus appears ex-situ (3-A2) is infelicitous because the non-exhaustive interpretation is not conveyed by the ex-situ construction.

- (3) Q: Hwan na ɔ-ba-a ayie no?
 who FM 3.SG.SUBJ.ANI-come-PST funeral DET
 ‘Who came to the funeral?’
- A1: KOFI ba-a-e-ε.
 Kofi come-PST-DITRANS-TM
 ‘KOFI came.’
- A2: *KOFI na ɔ-ba-a-e-ε.
 kofi FM 3.SG.SUBJ.ANI-come-PST-DITRANS-TM
 ‘It was KOFI who came.’

(Duah, 2014, 23; glosses adjusted)

Although the example in (3) supports the claim of Genzel (2013), the issue of in-situ focussed subjects in Akan needs further investigation. This includes especially the collection of controlled data on the realisation of subject focus in non-questions (see Saah, 1988; Kobele and Torrence, 2006, for data on questions). Moreover, quantitative studies investigated the preferences for marking different focus types on the object (Genzel and Kügler, 2010; Kügler and Genzel, 2012) but did not address the issue of subject focus marking. Therefore, the present article aims at answering the following questions:

- (i) Are focussed subjects obligatorily realized ex-situ in Akan?
- (ii) Which role does exhaustivity play for marking focus? Does ex-situ focus involve an exhaustive interpretation?

To answer these questions, we conducted a questionnaire study and a production experiment. The questionnaire study, which functions as a pre-study to the experiment, should show whether the grammatical judgements by Duah (2014)

presented in (3) can be generalized and whether the reverse prediction holds for exhaustive contexts, i. e., whether an in-situ focussed subject is infelicitous in an exhaustive context. The production experiment was carried out in order to quantify the results.

2 Pre-study – A questionnaire

2.1 Methodology

The questionnaire comprised two English question-answer pairs, in which the focus was elicited on the subject of the answer, see (4) and (5). The focus in (4) should be interpreted as exhaustive, since *Kodwo* was the only person who ate the food. The focus in (5), on the other hand, should be interpreted as non-exhaustive, because more than one person arrived: Apart from *Kofi*, *Ama* arrived, too. The participants were instructed to translate the question and the answer to Akan ('Translation Task', see Renans et al., 2011) and, especially, to clarify whether the focussed subject in the answer could be realized in-situ. In total, three native speakers of Akan answered the questionnaire. All of them were male and between 24 and 30 years old.

- (4) Q: Who ate the food?
A: KODWO ate the food.
- (5) Q: Kofi arrived. Who else arrived?
A: AMA arrived.

2.2 Results

The results of the questionnaire are given in (6) and (7). Regarding the translation of the answer to the exhaustive context (4), all participants stated that focussing the subject in-situ was not preferred here, which is indicated by the question mark in front of the structure in (6-A1). Two speakers claimed that

the in-situ construction did not answer the question sufficiently, whereas one speaker described it as odd. Consequently, the focussed subject had to be expressed by an ex-situ construction in the answer. This is illustrated in (6-A2). Ex-situ focus is indicated by the presence of the focus marker *na*, and by the resumptive animate third person subject pronoun *ɔ*, which is prefixed to the verb.

- (6) Q: Who ate the food?
 A1: ? KODWO di-i adua no.
 Kodwo eat-PST food DET
 ‘KODWO ate the food.’
 A2: KODWO na ɔ-di-i adua no.
 Kodwo FM 3.SG.SUBJ.ANI-eat-PST food DET
 ‘It was KODWO who ate the food.’

The answer to the *wh*-question of the non-exhaustive context (5) was translated as the structure in (7-A1) by all three participants. The focussed subject was followed by the additive particle *nso*. Following Amfo (2010), we assume that this structure is an instance of in-situ focus. One speaker explicitly judged (7-A2) as ungrammatical. The other two speakers did not comment on the appropriateness of the ex-situ structure in the non-exhaustive context.

- (7) Q: Kofi arrived. Who else arrive?
 A1: AMA nso ba-a.
 Ama also come-PST
 ‘AMA also came.’
 A2: * AMA na ɔ-ba-a.
 Ama FM 3.SG.SUBJ.ANI-come-PST
 ‘It is AMA who came.’

2.3 Conclusion

Our results confirm the judgements of Duah (2014) insofar as none of the speakers used an ex-situ subject followed by the focus particle *na* in answers to a

context that elicits a non-exhaustive interpretation. The reverse relation holds for the exhaustive context, in which in-situ focus was regarded as infelicitous. These findings show that the realization of the focussed constituent depends on the interpretation of the focus (exhaustive vs. non-exhaustive). The experiment, which is presented in the next section, investigates whether the results of the questionnaire also hold for a larger sample.

3 Production experiment

3.1 Methodology

The set-up of the production experiment was inspired by the ‘Focus Cards’ task of the Questionnaire on Information Structure (QUIS, see Skopeteas et al., 2006), in which participants have to answer questions about visual stimuli (see also Kügler and Genzel, 2014). Similar to the questionnaire, the experiment comprised two conditions, which elicited different focus interpretations: The first condition established an exhaustive, and the second one a non-exhaustive focus interpretation. In order to control for syntactic priming effects, the wh-questions used in both conditions were constructed with the wh-phrase appearing ex-situ, see (8a) and (9a), and in-situ, see (8b) and (9b). Each condition was repeated four times throughout the experiment. Additionally, filler items were interspersed to make the experiment more varied. All stimuli were randomized and then organized such that fillers and experimental items alternated.

Exhaustive focus on the subject was elicited through the context questions in (8). The visual stimulus used in this condition is displayed in Figure 1(a). To ensure that the participants interpret the subject exhaustively, only one of the displayed persons was holding the type of fruit that was mentioned in the corresponding question. The name of the displayed person was given below the picture in both conditions.

- (8) a. Hwan na $\text{\textcircled{c}}$ -kura aborɔbɛ no?
 who FM 3.SG.SUBJ.ANI-hold.PRS pineapple DET
 ‘Who is holding the pineapple?’
- b. Hwan kura aborɔbɛ no?
 who hold.PRS pineapple DET
 ‘Who is holding the pineapple?’



(a) Exhaustive condition



(b) Non-exhaustive condition

Figure 1: Visual stimuli used for the exhaustive (a) and non-exhaustive (b) condition.

Non-exhaustive focus on the subject was elicited using the questions in (9). The corresponding visual stimulus is presented in Figure 1(b). Since the focus

should be interpreted as non-exhaustive in this condition, the displayed photos showed two persons holding the same type of fruit.

- (9) a. Sara kura kwadu. Hwan bio na ɔ-kura
 Sara hold.PRS banana who also FM 3.SG.SUBJ.ANI-hold.PRS
 kwadu?
 banana
 ‘Sara is holding a banana. Who else is holding a banana?’
- b. Sara kura kwadu. Hwan bio kura kwadu?
 Thomas hold.PRS banana who also hold.PRS banana
 ‘Thomas is holding a banana. Who else is holding a banana?’

All context questions were spoken by a native male speaker of Asante Twi and were recorded in a quiet room at the University of Potsdam. The recordings were made directly on a laptop using Audacity (version 2.0.5) and a microphone. In the experiment, the pre-recorded questions were presented through headphones (Sennheiser HD 520 II).



Figure 2: Experimental set-up using presentation-software for both conditions.

The experiment was carried out using presentation software. Each slide of the experiment included a loudspeaker icon at the top and the visual stimuli at the

bottom, see Figure 2. The participants were instructed to first click on the loud-speaker icon to listen to the pre-recorded question. Second, they were asked to answer the question with reference to the visual stimuli. In order to familiarise the participants with this task, a test trial consisting of five stimuli preceded the experiment. The experiment was self-paced.

The answers of the participants were recorded on a laptop and edited with Praat (version 5.1.35). The resulting structures were analysed as *ex-situ* when they contained the focus marker *na* (or *ne/ne*), together with the resumptive animate third person subject pronoun *ɔ-* or the inanimate variant *ε-*. Structures that neither contained the focus marker *na* plus resumptive pronoun nor *ne* were analysed as *in-situ*. Following Amfo (2010), we analysed structures that exhibited the additive particle *nso* as *in-situ*. Instances in which a pronoun was prefixed to the verb were also analysed as *in-situ*. The pronoun may be a left-over verb agreement prefix (Osam, 1994, 124). This is illustrated in (10) with an animate subject pronoun. We assume that the inanimate variant may occur as well. The question mark in (10) indicates that the structure is grammatical but not frequently used by speakers of Akan.

- (10) ? o-wura no o-nim ade.
 3.SG.SUBJ.ANI-man DET 3.SG.SUBJ.ANI-know thing
 ‘The man is intelligent.’

(Osam, 1994, 124; glosses adjusted)

3.2 Participants

Eleven native speakers of Akan (6 male, 5 female) participated in the experiment. Of these eleven participants, ten were native speakers of the Asante Twi dialect. One male participant was a native speaker of the Fante dialect. Most speakers stated that English was their second native language or the language they primarily use. The average age was 35 years. Eight native speakers (including the Fante speaker) were between 21 and 32 years old. The remaining

three speakers were 50, 54 and 62 years old. The majority of the Akan speakers were recorded at the community hall of the St. Marien Liebfrauen congregation in Berlin-Kreuzberg.

3.3 Results

In total, 88 target structures were produced, all of which contained a focussed subject. One construction in the non-exhaustive condition was a slip of the tongue, and consequently discarded from further analysis. Hence, the total structures analysed sum up to 87 in Table 1, which displays the absolute frequencies of ex-situ and in-situ subjects in the exhaustive and non-exhaustive condition. Overall, subjects were slightly more frequently focussed ex-situ (53%) than in-situ (47%).

Condition	Construction		Total
	ex-situ	in-situ	
exhaustive	40	4	44
non-exhaustive	6	37	43
Total	46	41	87

Table 1: Absolute frequencies of ex-situ and in-situ focussed subjects in the exhaustive and non-exhaustive condition.

The majority of answers to the exhaustive context questions were realized with an ex-situ focussed subject. 40 of a total of 44 structures were analysed as ex-situ, since they either contained the focus marker *na* and a third person subject pronoun prefixed to the verb, or the assimilated variant of the focus marker, *ne*. The maximally possible ex-situ structure, inspired by Kobele and Torrence (2006), is presented in (11), parentheses mark optionality.

- (11) a. (ε -y ε) SUBJECT na \varnothing/ε -verb object
 b. (ε -y ε) SUBJECT (ε -)ne verb object

(based on Kobele and Torrence, 2006, 165)

31 out of these 40 *ex-situ* structures contained the assimilated variant of the focus marker, *ne*. As shown in (11b), the minimal realization of this structure only contains the assimilated variant of the focus marker. This was the case for 19 of the 31 *ex-situ* cases. An example is presented in (12).

- (12) SARA ne kura apro no.
 Sara FM.3.SG.SUBJ.INA hold.PRS apple DET
 ‘It is SARA who is holding the apple.’

In 10 of these 31 cases, the assimilated variant of the focus marker, *ne*, was preceded by the third person inanimate subject pronoun ε -, as shown in (13).

- (13) SARA ε -ne kura apro no.
 Sara 3.SG.SUBJ.INA-FM.3.SG.SUBJ.INA hold.PRS apple DET
 ‘It is SARA who is holding the apple.’

The assimilated variant of the focus marker, *ne*, was preceded by the copula ε -y ε in two out of these 31 cases. When the copula occurred, no inanimate third person subject pronoun preceded the focus marker *ne*, as illustrated in (14).

- (14) ε -y ε THOMAS ne kura
 3SG.SUBJ.INA-be.PRS Thomas FM.3.SG.SUBJ.INA hold.PRS
 aborɔbɛ no.
 pineapple DET
 ‘It is THOMAS who is holding the pineapple.’

In the remaining nine *ex-situ* realizations, the focus marker *na* occurred. *Na* was never preceded by the inanimate third person subject pronoun ε . However, a third person pronoun, which was prefixed to the verb, occurred without exception, which is illustrated in (15).

- (15) SARA na ɔ-kura apro no.
 Sara FM 3SG.SUBJ.ANI-hold.PRS apple DET
 ‘It is SARA who is holding the apple.’

Table 1 lists four instances of in-situ focus in the exhaustive condition. Two of these four sentences did not contain any pronoun or focus marker. An example showing a canonical SVO sentence is presented in (16). The focus marker *na* did not appear.

- (16) LAURA kura ankaa no.
 Laura hold.PRS orange DET
 ‘LAURA is holding the orange.’

In the other two instances, an inanimate third person subject pronoun preceded the verb. This is illustrated in (17). The occurrence of a subject pronoun prefixed to the verb without further morphological marking is not taken to indicate displacement of the subject out of its base position, since the pronoun may be a left-over verb agreement prefix, cf. (10) and also (22) below.

- (17) LAURA ε-kura ankaa no.
 Laura 3SG.SUBJ.INA-hold.PRS orange DET
 ‘LAURA is holding the orange.’

Turning to the non-exhaustive condition, the majority of answers were realized with an in-situ focussed subject. This applies to 37 of a total of 43 cases, cf. Table 1 above. In 33 of the 37 in-situ realisations, the additive particle *nso* occurred. 18 of these 33 cases only contained *nso*. An example is presented in (18). Recall that the presence of the additive focus particle does not imply syntactic movement (Amfo, 2010), which means that the subject is analysed as in-situ.

- (18) SARA nso kura apro.
 Sara also hold.PRS apple
 ‘SARA is also holding an apple.’

The additive particle *nso* was preceded by the third person inanimate subject pronoun ε in 10 of these 33 cases. The structure is illustrated in (19).

- (19) LAURA ε -*nso* *kura* *kwadu*.
 Laura 3SG.SUBJ.INA-also hold.PRS banana
 ‘LAURA is also holding a banana.’

Five further instances that contained the additive particle *nso* also exhibited the inanimate third person subject pronoun which, in these realizations, was prefixed to the verb. An example is presented in (20). Note that the verb *kita* is a variant of the verb *kura* ‘to hold’. The participants of this study preferably used the latter.

- (20) THOMAS *nso* ε -*kita* *aborɔbɛ*.
 Thomas also 3SG.SUBJ.INA-hold.PRS pineapple
 ‘THOMAS is also holding a pineapple.’

In one of these five cases, the third person inanimate subject marker ε occurred twice, preceding the additive particle *nso* and preceding the verb. The structure is shown in (21).

- (21) DANIEL ε -*nso* ε -*kura* *ankaa*.
 Daniel 3SG.SUBJ.INA-also 3SG.SUBJ.INA-hold.PRS orange
 ‘DANIEL is also holding an orange.’

The remaining four in-situ structures did not contain any particle after the focussed subject. They contained either the inanimate third person subject pronoun ε (3 cases) or the animate third person subject pronoun ɔ (1 case) prefixed to the verb; no additive particle appeared. This is illustrated in (22).

- (22) SARA o -*kura* *apro*.
 Sara 3.SG.SUBJ.ANI-hold.PRS apple
 ‘SARA is holding an apple.’

As shown in Table 1, 6 out of 43 answers in the non-exhaustive context were analysed as ex-situ constructions, because they contained the assimilated focus

marker *ne*. Hence morpho-syntactic marking of the subject by means of *na/ne* occurred very rarely in the non-exhaustive condition. In two of these six cases only the assimilated focus marker *ne* was present. An example is shown in (23).

- (23) LAURA *ne* kura kwadu ka Daniel ho.
 Sara FM.3.SG.SUBJ.INA hold.PRS banana be.with Daniel there
 ‘It is LAURA who is holding a banana besides Daniel.’

In three of these six cases, the focus marker *ne* was preceded by the inanimate third person subject pronoun ε , and in one case, by the copula. The latter case also contained a final *bio* (‘also’). However, ε preceding the focus marker and the copula never co-occurred. The structure containing the focus marker *ne*, the copula and *bio* is shown in (24).

- (24) ε -y ε DANIEL *ne* kura ankaa
 3SG.SUBJ.INA-be.PRS Daniel FM.3.SG.SUBJ.INA hold.PRS orange
 bio.
 also
 ‘It is DANIEL who is also holding an orange.’

In one case, the focus marker *ne* followed the additive particle *nso*, which itself was preceded by the inanimate third person subject pronoun ε . The realisation is presented in (25).

- (25) SARA ε -nso ε -*ne*
 Sara 3SG.SUBJ.INA-also 3SG.SUBJ.INA-FM.3.SG.SUBJ.INA
 kura apro no.
 hold.PRS apple DET
 ‘It is even SARA, who is holding the apple.’

4 Conclusion

In the present article, we investigated the effect of exhaustivity on the realization of focussed subjects in Akan by carrying out a questionnaire study and a production experiment. The data was collected to answer the following questions:

(i) Are focussed subjects obligatorily realized ex-situ? (ii) Which role does exhaustivity play for marking focus? Does ex-situ focus involve an exhaustive interpretation?

Regarding the first question (i), the questionnaire and the production experiments showed that focussing the subject in-situ is possible. A note is due to our analysis of in-situ focussed subjects in Akan in the production experiment. First, we followed Amfo (2010) and analysed the appearance of the additive focus particle *nso* following the subject as cases of in-situ focus, cf. the data in (18), (19), (20), and (21). According to Amfo (2010), a structure with the additive particle following the subject does not indicate syntactic movement of the subject constituent. Second, some of the structures that we analysed as in-situ subject focus contained a resumptive pronoun prefixed to the verb, cf. the data in (17) and (22). Our analysis follows Osam (1994, 124) who argues that this resumptive pronoun may constitute a left-over verb agreement prefix, cf. his example in (10). This structure is reminiscent of a left dislocated topic structure (Boadi, 1974; Ameka, 1992; Saah, 1992; Ermisch, 2006), in which the topic constituent occurs sentence-initially and a resumptive pronoun surfaces in the dislocated constituent's base position. However, since our experiment did not control for topicality of the subject, we decided to interpret instances involving a resumptive pronoun as in-situ focussed subjects.

Overall, 41 out of 87 answers of the production experiment that contained a focussed subject were analysed as in-situ structures. 37 of the 41 in-situ cases were realized in the non-exhaustive context. Most of the subjects in the non-exhaustive condition were followed by the additive focus marker *nso*. This result is presumably due to the context question, see (9), which asked for 'who else ...?'. Four instances without any morphological marking appeared as answers to questions that triggered an exhaustive interpretation, see (8). The remaining 40 cases in this condition were realized ex-situ. Most of the subjects in the exhaustive condition were followed by the focus marker *ne/na*. We conclude that focussed subjects do not have to be obligatorily realized ex-situ in Akan.

Ex-situ focussed subjects are not preferred in non-exhaustive contexts and in-situ realizations without any morphological marking are possible in exhaustive contexts.

With regard to the second question (ii), the questionnaire and the production experiment have shown that exhaustivity plays an important role. The results of the production experiment clearly indicate that the choice of the focus marker depends on exhaustivity. In contexts that trigger an exhaustive interpretation, Akan speakers prefer to mark a subject morpho-syntactically by means of constituent fronting and insertion of the focus marker *ne/na*. Morpho-syntactic focus marking was rarely used in contexts that trigger a non-exhaustive interpretation. Boadi (1974) analysed the focus marker *ne/na* as an ‘exclusive’ focus marker. However, our data suggest that this interpretation of the focus marker is too narrow, since the use of *ne/na* is possible in non-exhaustive contexts as well. As an alternative analysis, Ofori (2011) suggests that *na* is derived via fusion of the copula *ne* and the relativizer *a*.⁶ According to him, the function of *na* is not to exclude, individuate or emphasize, as put forward by Boadi (1974) but to demand, assert, or achieve definiteness.

Finally, we cannot conclude whether Akan exhibits a subject-object asymmetry, since our study only investigated the syntactic preferences of focussed subjects. Genzel and Kügler (2010) carried out a situation description task investigating the syntactic preferences of (exhaustive) object focus in answers to wh-questions. Their results show a preference for objects to be realized in-situ without any morphological marking. Furthermore, it has been shown that focussed objects may be marked prosodically (Genzel, 2013; Kügler and Genzel, 2012). Whether or not in-situ subjects may also be marked prosodically has to be left for future research. Subjects were preferably realized ex-situ in the exhaustive condition in the present study. However, to reach a conclusion about

⁶ Note that the focus verb/copula *ne* [ni] and the assimilated variant of *na, ne*, are homophones in Asante Twi. However, sentences that contains the focus verb/copula *ne* also usually contain the relativizer *a*, which is absent in our data.

the presence or absence of a subject-object asymmetry, a similar experiment would have to be conducted for subjects and non-subjects. What can be concluded from the present data is that even the marking of focussed subjects can be asymmetric. They can either remain in-situ or appear ex-situ. This finding contrasts with the proponents of the subject-object asymmetry, who argue that subjects have a particular thematic status that requires additional marking in case of focus (Hartmann and Zimmermann, 2007; Fiedler et al., 2010). Our data has shown that the preference for the morpho-syntactic realization of focussed subjects in Akan is triggered by the interpretation of the focus.

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Simone Pfeil
University of Potsdam
Department of Linguistics
Karl-Liebknecht-Straße 24/25
14476 Potsdam
Germany
pfeil.simone@gmail.com

Susanne Genzel
University of Potsdam
SFB 632 “Informationsstruktur”
Karl-Liebknecht-Straße 24/25
14476 Potsdam
Germany
susanne7@gmail.com

Frank Kügler
University of Potsdam
Department of Linguistics & SFB 632 “Informationsstruktur”
Karl-Liebknecht-Straße 24/25
14476 Potsdam
Germany
kuegler@uni-potsdam.de

Modality in Kakataibo^{*}

Daniel Valle

University of Texas at Austin

This paper explores the semantic space of modality in Kakataibo (Panoan). It is found that Kakataibo makes a distinction in the modal space based on the modality type. Circumstantial modality is encoded by a construction while the epistemic space is conveyed by the second position enclitics =*dapi* ‘inferential’, =*id* ‘second-hand information’ and =*kuni* ‘contrastive assertion’. However, none of these strategies to encode modality restricts the quantificational force, leaving it underspecified. These facts are consistent with the predictions of current typologies of modal systems.

Keywords: modality, conversational background, quantificational force, Kakataibo

1 Introduction

This paper explores the semantic space of modality in Kakataibo (Panoan, ISO 639-3 code ‘cbr’). Modality is related to the expression of necessity and possibility. In a modalized utterance, the prejacent proposition, the propositional content without the modal meaning itself, is modified in terms of its possibilities of being necessary or possible. This first dichotomy distinguishes between the meanings of *Anne must go to a university* in contrast to *Anne might go to a university*, where these two utterances differ in their necessity or possibility interpretation, respectively. In addition, modalized utterances may receive different interpretations according to the context. For instance, the utterance

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Anne must go to a university may be interpreted as an obligation for *Anne* (deontic modality) or as an inferred fact (epistemic modality).

In order to study these aspects of modality more precisely, a simplified version of the machinery of *possible world semantics* is adopted here (Kratzer 1977, 1991). Under this framework, modals are analyzed as quantifiers over possible worlds, where universal and existential quantification correspond to necessity and possibility, respectively. The other main components in the semantics of modals are the conversational background and the ordering source. Conversational backgrounds are a set of propositions that provide the context under which modals are evaluated and acquire their modality type (e.g. deontic, epistemic, etc.). For instance, deontic modality is evaluated under those worlds that are compatible with the relevant body of law or moral principles or deontic conversational background; epistemic modality is evaluated under those worlds that are suited to what is known, the available evidence, having an epistemic conversational background. An accessibility relation is responsible for making available the relevant conversational background to the world in which the sentence is evaluated. In some instances, a ranking of the accessible worlds is necessary when some propositions are conflicting among them. The ordering source takes care of ranking the worlds favoring some of these propositions. In summary, the meaning of modals is analyzed using three different tools: quantification force, conversational background (or modal base) and an ordering source.

Typologically, languages tend to divide the modal semantic space by making restrictions or not in the modal force (quantification) or the conversational background (Matthewson 2013). Some languages such as English and German restrict the modal force, which distinguishes *must* from

may in English, but are unselective with regard to the conversational background, which allows the same modal to have different types of readings (e.g. *must* as deontic or epistemic). In contrast, other languages such as St'át'imcets (Matthewson *et al.* 2005) prefer to be selective with the conversational background, which makes modals to receive only one type of reading (e.g. deontic or epistemic, but not both), but they leave the modal force unrestricted, which allows the modal to receive both universal and existential interpretations.

In this paper it will be shown that Kakataibo patterns more like St'át'imcets in that it restricts the conversational background but leaves the modal force underspecified. In Kakataibo, different kinds of modality meanings such as deontic (concerned with a body of law or moral principles), bouletic (concerned with a person's desires), and pure circumstantial (concerned with the circumstances, see Leech 1971, De Haan 2006, Palmer 2014 among others for more on typologies of modal meanings) are expressed through a construction involving the inflected copula verb 'to be' taking as one of its arguments a clausal nominalization marked by *-ti* 'future nominalizer', *Clause+ti be+FLEX* (Section 2). In turn, epistemic modality is encoded by a set of second position clitics *=dapi* 'inferential', *=id* 'second-hand evidential' and *=kuni* 'contrastive assertion' (Section 3). In contrast, the quantificational force of the modals in Kakataibo is left underspecified. In addition, the grammar of Kakataibo allows more than one modal clitic or construction yielding complex modal semantic networks in a single monoclausal sentence.

Kakataibo is a language of the Panoan linguistic family spoken in Peruvian central Amazon by approximately 1500 speakers (Frank 1994) although the current number of speakers is on the rise (Zariquiey p.c.). Kakatibo

constitutes the only member of one of the branches within the Panoan linguistic family (Shell 1985, Loos 1999, Valenzuela 2003, Fleck 2013). This paper focuses only on the San Alejandro dialect of Kakataibo, one of the five identified for this language (Zariquiey 2011a).

The Kakataibo data for this paper comes from the author's fieldwork, unless otherwise stated. Data comes from both natural speech (NS) obtained through participant observation and elicitation (EL). Sentences from natural speech were checked with native speakers recreating the context in which they were uttered. Elicitation sessions involved direct elicitation and elicitation using visual material (TFSC). Elicitation session always involved explaining a discourse context to the speakers, as is common practice in semantics fieldwork (Matthewson 2004). This paper is based on the judgments of six native speakers of Kakataibo.

In describing the Lower Aguaytía dialect of Kakataibo, Zariquiey (2011b:499-507) identifies *=kuni* 'certitudinal', *=sapi* 'dubitative' and *=kaia* 'contrastive' as epistemic modals, without labeling them as such. The enclitic *=kuni* is described as making the propositional content of the sentence highly certain. The dubitative *=sapi* can be used for weak predictions based on indirect evidence or speculation. The contrastive *=kaia* makes a comparison between events or individuals in which the event or the participant of the proposition uttered is preferred to the events or individuals present in the common ground. The second position clitic *=id/=is* has been identified as an evidential marker (Shell 1978, Zariquiey 2011b:508-514). Section 3.2. discusses some diagnostic tests that suggest that *=id* is best considered as an epistemic modal.

Some basic features of the grammar of Kakataibo relevant to the present subject are discussed here (see also Zariquiey 2011b). Kakataibo uses a templatic sentential structure that involves the obligatory presence of at least one of the second position clitics =*ka* or =*id* followed by person marking clitics (PM) and the optional presence of other second position clitics that precede them. The order in which these second position clitics occur is fixed, as shown in (1).

(1) (XP)=kuni=dapi=*ka*=*id*=PM (XP) V

There is an extensive use of nominalizations in Kakataibo. At least four nominalizers in Kakataibo differing in relative tense have been identified: *-ti* ‘future nominalizer’, *-kë* ‘non-future nominalizer’, *-a* ‘remote past nominalizer’ and *-ai* ‘present non-habitual nominalizer’. The nominalizer ‘future nominalizer’ *-ti* is part of the construction encoding circumstantial modality.

Kakataibo encodes aspect via obligatory verbal suffixes *-i* ‘imperfective’ and *-a* ‘perfective’. The imperfective is used for non-past events while the perfective is used for past events.¹ Tense is encoded by a different set of verbal suffixes, as shown below.

¹ The tense-aspect system of Kakataibo is more complex than what is sketched here, but this will not be discussed in this article since it does not affect the main content of this paper.

(2)	=ka=na	pi-i		
	=VAL=1A/S	eat-IPFV		
	‘I eat / I am eating / I am going to eat / I will eat.’			
	ka=na pi-a	=VAL=1A/S	eat-PFV	‘I ate.’
	ka=na pi-pun-	=VAL=1A/S	eat-HOD1	‘I ate earlier today.’
	ka=na pi-ña-	=VAL=1A/S	eat-HOD2	‘I ate earlier today.’
	ka=na pi-nēt-	=VAL=1A/S	eat-LN	‘I ate last night.’
	ka=na pi-on	=VAL=1A/S	eat-HST	‘I ate yesterday.’
	ka=na pi-ëxan	=VAL=1A/S	eat-REC.PST	‘I ate some days ago.’
	ka=na pi-akë	=VAL=1A/S	eat-REM.PST	‘I ate years ago.’

2 Circumstantial modality in Kakataibo

Circumstantial modality, concerned with what is possible or necessary given a set of circumstances (e.g. laws, desires, etc.), is encoded in Kakataibo using a construction that has the copula verb ‘to be’ fully inflected, taking as one of its arguments a clausal nominalization (CN) marked by the future nominalizer *-ti*, [Clause-*ti*]_{CN} be+FLEX. This construction covers the whole semantic range of circumstantial modality, including pure circumstantial, deontic, abilitive and bouletic readings. The quantificational force in this construction is left underspecified being resolved by the context for which both universal and existential readings are obtained. Examples (3)–(6) show deontic uses of this construction. Universal readings are obtained in (3) and (4) while existential ones are given in (5) and (6). The construction and/or morpheme(s) under consideration are boldfaced in the examples.

- (3) Context: A child is getting low grades in school because of being out playing; his father warns him:

minkaina kirika **‘ati** **‘ai.**²
 mi=n=ka=ina kirika ‘a-ti ‘a-i
 2=A/S=VAL=2A/S paper do-FUT.NMLZ be-IPFV
 ‘You have to study.’ (EL)

- (4) Context: A person is telling everybody about his baby tapir that he is raising. He is telling people to be aware of that and not to confuse it with a wild tapir from the forest.

a kupinkamina ‘ó bakë **tunkatima** **‘ai.**
 a kupin=ka=mina ‘ó bake tunkat-ti=ma ‘a-i
 3 for=VAL=2A/S tapir baby shot-FUT.NMLZ=NEG be-IPFV
 ‘For that reason, you do not have to shoot at the baby tapir.’ (NS)

- (5) Context: I need to go to the city. I see my friend getting his canoe ready for travelling. I ask him if I may travel with him, he answers:

ën nuntinukamina **kuanti** **‘ai.**
 ë=n nunti=nu=ka=mina kuan-ti ‘a-i
 1=POSS canoe=LOC=VAL=2A/S go-FUT.NMLZ be-IPFV
 ‘You may travel in my canoe.’ (EL)

- (6) Context: The speaker is talking about some visitors that are expected to come but are delayed. Since they are delayed, they have to take the fastest way to arrive at the community.

ain ‘autonabika ënu **uti** **‘ikë.**
 ain ‘auto=na=bi=ka=a ë=nu u-ti ‘ikë
 3.POSS car=INS=EMPH=VAL=3A/S 1=LOC come-FUT.NMLZ be.3.IPFV
 ‘They have to come in their car / They might come in their car.’ (NS)

² Abbreviations: 1 ‘first person’, 2 ‘second person’, 3 ‘third person’, A ‘subject of transitive verb’, DUR ‘durative’, EMPH ‘emphatic’, ESD ‘earlier same day’, HST ‘hesternal’, INTR ‘intransitive’, INS ‘instrumental’, IPFV ‘imperfective’, LOC ‘locative’, NMLZ ‘nominalizer’, NEG ‘negation’, N.PROX ‘non-proximate’, O ‘object of transitive verb’, PL ‘plural’, PFV ‘perfective’, POSS ‘possessive’, PROX ‘proximate’, REFL ‘reflexive’, REM.PST ‘remote past’, S ‘subject of intransitive verb’, SE: simultaneous event’, TEMP ‘temporal’, VAL ‘validational’.

Besides deontic readings, the construction [Clause+ti]_{CN} V+flex can have other circumstantial readings as well, such as pure circumstantial (7), abilitive (8) and bouletic (9).

- (7) Context: I have eaten food that was bad and my stomach is feeling bad.

kana **kináti** **‘ai.**
 ka=na kinat-ti ‘a-i
 VAL=1A/S vomit-FUT.NMLZ be-IPFV
 ‘I have to throw up.’ (EL)

- (8) Context: Speakers are discussing how strong they are.

ėnkana cinco in **papiti** **‘ai.**
 ě=n=ka=na cinco in papi-ti ‘a-i
 1=A/S=VAL=1A/S five tree carry-FUT.NMLZ be-IPFV
 ‘I am able to carry five (pieces of) wood.’ (EL)

- (9) Context: Speaker A wants to go to Lima urgently because a relative is in the emergency room in the hospital. Speaker B advises him to use the fastest way to get there.

aviónnėkaina Limanu **kuanți** **‘ai.**
 avión=nė=ka=ina Lima=nu kuan-ti ‘a-i
 plane=INS=VAL=2A/S Lima=LOC go-FUT.NMLZ be-IPFV
 ‘You should travel by plane to Lima.’ (EL)

While the quantificational force is left underspecified, this construction delimits the conversational background to be only circumstantial given the context of the utterance. Examples (10) and (11) show that the use of this construction where an epistemic conversational background is selected is odd.

- (10) Context: Speaker A knows that speaker B always studies at home in the afternoon every day. Speaker A goes to speaker B’s home in the afternoon. After greeting each other, speaker A tells speaker B:

minkaina *kirika* ‘**ati** ‘**ai.**
mi=n=ka=ina *kirika* ‘a-ti ‘a-i
 2=A/S=VAL=2A/S *paper* do-FUT.NMLZ be-IPFV
 ‘You have to study.’ (EL)
 Intended: You must be studying.

- (11) Context: I know that each time I eat bad fish I immediately throw up. I have just eaten bad fish. I do not feel any stomach pain or other symptoms of food poisoning. Nevertheless, I say to myself:

kana ***kináti*** ‘**ai.**
ka=na *kinat-ti* ‘a-i
 VAL=1A/S vomit-FUT.NMLZ be-IPFV
 ‘I have to throw up.’ (EL)
 Intended: I may throw up.

This construction does not show further uses than that of expressing circumstantial modality in my database and thus is considered as a grammaticalized device to encode that meaning.

It is interesting to note that out of the available set of nominalizers in Kakataibo (see section 1), this construction only utilizes the future nominalizer *-ti*. This fact is predicted by the claim that circumstantial modals tend to have a future temporal orientation (Condoravdi 2002, Kratzer 2012), that is, circumstantial modals assert something about a possible event that occurs after the time the modal is evaluated. Thus, the use of the future nominalizer adds this component of future temporal orientation to the circumstantial construction in Kakataibo. However, notice that it does not entail that this construction may not occur with non-future readings. Since the relative future tense orientation that *-ti* contributes operates on top of the absolute tense encoded by the main verb inflection, it is possible to evaluate the modal in the future of the past, as illustrated below and examples (33 and 35).

The temporal perspective of the modalized clause can be changed by simply manipulating the tense/aspect inflection of the main verb (see Section 1) of the construction. Examples (12) and (13) illustrate this with the remote past suffix and the earlier same day suffix, respectively.

- (12) Context: I have had a serious car accident. I broke a leg and had to be in recovery for eight months.

bari isinkana	kuin abati	‘akë.
bari isi=n=ka=na	kuin abat-ti	‘a-akë
sun other=TEMP=VAL=1A/S	very run-FUT.NMLZ	be-REM.PST
‘I could run fast years ago.’ (EL)		

- (13) Context: I know that each time I eat bad fish I immediately throw up. I ate bad fish in the morning.

kana	kináti	‘apuni.
ka=na	kinat-ti	‘a-pun-i
VAL=1A/S	vomit-FUT.NMLZ	be-HOD1-IPFV
‘I had to throw up earlier today.’ (EL)		

Negation of the circumstantial modal meaning is accomplished using the general negative clitic =*ma*. This strategy is used to negate all the subtypes of circumstantial modality, (14) shows an instance of negation of an abilitive. This strategy is used for both existential and universal readings. However, a different strategy, [Clause-*ti*]_{CN} ‘*a-ti-paya=ma* do-FUT.NMLZ-?=NEG, is preferred in negative existential contexts, as in (15). Notice that both constructions are accepted in that context but the second construction [Clause-*ti*]_{CN} ‘*a-ti-paya=ma* cannot be used in sentences involving universal quantification.

- (14) Context: The speaker is talking about a hernia that he got because of carrying many heavy pieces of wood. This affects his ability to carry things now.

kana ñu iyë **papiti** ‘**aima**.
ka=na ñu iyë papi-ti ‘a-i=ma
VAL=1A/S thing heavy carry-FUT.NMLZ be-IPFV=NEG
‘I cannot carry heavy things.’ (EL)

- (15) Context: Discussing what human beings are capable or not of doing.

unikamaka nuanti ‘**atipayama**.
uni=kama=ka=a nuan-ti ‘a-ti-paya=ma
people=PL=VAL=3A/S fly-FUT.NMLZ be-FUT.NMLZ-?=NEG
‘People cannot fly.’ (EL)

It has been shown that the construction $[\text{Clause}+\text{ti}]_{\text{CN}} \text{V}+\text{flex}$ triggers a circumstantial conversational background but leaves the quantificational force underspecified. Following Matthewson *et al.* (2005), a simplified semantics of this construction, represented as α , is given in (16). This proposal assumes a minimal standard formal machinery used to model modals (Portner 2009): a conversational background (c), and the basic components of possible worlds, world (w) and time (t). The ordering source of the conversation background is not included here for simplicity and because it has not been dealt with in this section. Notice that other ways to account for the contextual quantificational ambiguity of the modals have been proposed using choice functions variables (Rullman *et al.* 2008) and a (non-)empty ordering source (Peterson 2012).

- (16) $[[\alpha\phi]]^{w,t,c}$ is only defined if $B(c)$ is circumstantial.
If defined, $[[\alpha\phi]]^{w,t,c} = 1$ iff for all/some words in $w' \in B(c)(w, t)$,
 $[[\alpha\phi]]^{w',t,c} = 1$

The main properties of the circumstantial modal construction $[\text{Clause}+\text{ti}]_{\text{CN}} \text{V}+\text{flex}$ have been sketched here. This construction covers the

whole semantic space of circumstantial modality including deontic, ability and bouletic readings. It has also been shown that this construction is compatible with both existential and universal interpretations.

3 Epistemic modality in Kakataibo

Epistemic modality, concerned with what is possible or necessary given what is known and what the available evidence is, is encoded in Kakataibo by the second position clitics =*dapi* ‘inferential’, =*id* ‘second-hand evidential’ and =*kuni* ‘contrastive assertion’. These enclitics are analyzed next.

3.1 =*dapi*

The second position clitic =*dapi* ‘inferential’ carries a presupposition that the content of the proposition comes from inference. The type of evidence for the inference may be general knowledge, perceived evidence or previous experience. =*dapi* is compatible with universal and existential readings, which suggests that its quantificational force is left underspecified for the context to resolve. The conversational background imposed for this enclitic is always epistemic. Example (17) shows an instance of the use of =*dapi* with a universal reading and the evidence for the inference is directly perceived. (18) gets an existential interpretation given that the hearing of a shooting may be a sign of something else than hunting, such as alerting people that something is taking place. Example (19) is based on the knowledge that people in the community share while (20) corresponds to general knowledge.

- (17) Context: The speaker is arriving at the community from a distant city. He sees that the soil is wet and the river water level is higher:

ubē**dapika** ‘iubáxa.
 ubē=dapi=ka=a ‘i-ut-bait-a-x-a
 rain=dapi=VAL=3A/S be-DOWN-DUR-PFV-3-NON.PROX
 ‘It must have been raining.’ (EL)

- (18) Context: The speaker is walking in the forest. Suddenly, a gunshot is heard:

dapika ñu ‘axi.
 dapi=ka=a ñu ‘a-a-x-i
 dapi=VAL=3A/S animal do-PFV-3-PROX
 ‘(They) might have killed animals.’ (EL)

- (19) Context: You know that community dwellers usually go in group to the community hall when people from outside arrive. You see that the community hall is full of community dwellers.

a nukën idi ukëkamad**dapika** nukuáxi.
 a nukën id-i u-kë=kama=dapi=ka=a nuku-t-a-x-i
 3 1PL.O see-NMLZ come-N.FUT.NMLZ=PL=dapi=VAL=3A/S reach-REFL-
 PFV-3-NON.PROX
 ‘Visitors might have arrived.’ (EL)

- (20) Context: Manioc has been boiling for more than an hour.

‘asa ‘arukē**dapika** ‘iaxa.
 ‘asa ‘aru-kë=dapi=ka=a ‘i-a-x-a
 manioc cook-NFUT.NMLZ=dapi=VAL=3A/S be-PFV-3-N.PROX
 ‘The manioc must have been cooked.’ (EL)

As in the case of the circumstantial modality construction, there are no restrictions with regard to the tense of the proposition modalized by =*dapi*. Previous examples showed a past temporal perspective. The following example shows an instance with a present temporal perspective.

- (21) Context: The Peruvian soccer team is playing a match for the World Cup classifiers. People are watching the game but not the speaker and suddenly cheerful screaming is heard:

Perú**dapika** kanani.
 Perú=**dapi**=ka=a kanan-i-i
 Perú=**dapi**=VAL=3A/S win-IPFV-PROX
 ‘Peru may be winning.’ (EL)

Negation of the preajcent of =*dapi* uses the general negator =*ma*. However, notice that attaching =*ma* to the main verb yields ambiguous readings between the negation of the preajcent (22a) and negation of the modal (22b) when not enough context is given. Notice that the possibility of having these two interpretations implies that the modal meaning can project through negation which, in turn, is a diagnostic test indicating that =*dapi* is best regarded as a modal instead of a pure evidential.

- (22) Context A: Norua has been saying that he needs to go to San Alejandro to do some errands. But you know that there are no canoes available and the weather is bad:

Context B: You know that Norua has to go up river to work with a contractor in the woods. The contractor has paid him a part of his salary in advance. Norua feels obligated to pay his debt.

Norua**dapika** puentenu kuanima.
 Norua=**dapi**=ka=a puentenu kuan-i=ma
 Norua=**dapi**=VAL=3A/S bridge=LOC go-IPFV=NEG
 ‘Norua might not go to the bridge (San Alejandro city).’
 ‘It is not the case that Norua might go to San Alejandro.’ (EL)

A simplified semantics of =*dapi* is given in (23) in its modal function. Notice that it incorporates the inferential requirement it raises and its ability to occur in universal and existential readings.

- (23) $[[\alpha\Phi]]^{w,t,c}$ is only defined if $B(c)$ is inferential.
 If defined, $[[\alpha\Phi]]^{w,t,c} = 1$ iff for all/some words in $w' \in B(c)(w, t)$,
 $[[\alpha\Phi]]^{w,t,c} = 1$

In this subsection the main properties of =dapi have been shown. This enclitic requires an epistemic modal base that triggers the requirement that the speaker acquired the knowledge expressed by the proposition through inference. The enclitic =dapi does not lexically specify the quantificational force, which is left out for context. Variations in the reference time can be accomplished by simply manipulating the verbal morphology. Negation of =dapi allows for double readings changing the scope of the semantic operators.

3.2 =id

The second position clitic =id is a second-hand modal evidential. The use of =id is felicitous when the speaker has obtained the knowledge that the proposition expresses through somebody else's report. This reportative sphere includes information from second, and more distant sources, hearsay and oral tradition. The quantificational force of this epistemic modal is not lexically specified either; =id is appropriate regardless of whether the source of the report is considered to be reliable or not. Examples (24)–(26) illustrate the use of =id with different sources of the report.

- (24) Context: I did not see you yesterday at all. Someone told me that you hit the pregnant dog. Then, I say to you when I meet you:

id mina	‘ochíti	tuáñu	měó.
id= mina	‘ochíti	tuá=ñu	mě-on
id=2A/S	dog	offspring=HAVE	hit-HST

‘You hit the pregnant dog yesterday, reportedly.’ (EL)

- (25) Context: Someone has told the speaker about the events that occurred years ago and the speaker did not directly experience them:

don Cris**ida** uakēxa.
 don Cris=**id**=a u-akē-x-a
 don Cris=**id**=3A/S come-REM.PST-3-N.PROX
 ‘Don Cris came years ago, reportedly.’ (EL)

- (26) Context: First sentence of a traditional story:

ēda ‘**aida** chunan tita no
 ē=da ‘a-i-**id**=a chuna=n tita no
 1=LIKE do-A/S>S:SE=**id**=3A/S spider.monkey=POSS mother mestizo
 biakēxa.
 bis-akē-x-a
 catch-REM.PST-3-N.PROX
 ‘Thus, the big spider monkey caught the mestizo person, they say.’ (NS)

The relation between the semantics of evidentiality, that indicates source of information, and epistemic modality, related to the necessity or possibility of a proposition given what the available information is, share the feature of being built on the available knowledge. This semantic link between these two categories has recently received much attention (Kratzer 1991, Izvorsky 1997, de Haan 1999, Aikhenvald 2004, among others) and has led to some scholars to claim that some evidentials are better analyzed as epistemic modals in certain languages (Izvorsky 1997). Of course, some languages keep these categories separated based on the different behavior they show (Faller 2002, Matthewson *et al.* 2007). Namely, the evidential analysis assumes that a report is made, but it is not part of the propositional content of the sentence. In contrast, the epistemic modal analysis asserts that a report is made, but does not say anything about the content of the report. Here I sketch three standard diagnostic tests that suggest that =*id* is better regarded as an evidential modal, i.e., it conflates both functions.

A fully-fledged analysis of these properties cannot be carried out here due to space constraints and awaits future research.

Under the epistemic modal analysis of *=id*, it is predicted that a sentence will be infelicitous when it contains an embedded true proposition under the scope of *=id* (Faller 2002, Matthewson *et al.* 2007). The reason for this prediction is that under the modal analysis the speaker does not have enough grounds to regard the proposition as true, since the information comes from a report. This prediction holds in Kakataibo, as shown in (27).

- (27) Context: I did not see you yesterday at all. Someone told me that you hit the pregnant dog. Then, I say to you when I meet you:

idmina ‘ochíti tuáñu mēó, kana mi idó
 id=mina ‘ochíti tuáñu mē-on ka=na mi id-on
 id=2A/S dog offspring=HAVE hit-HST VAL=1A/S 2 see-HST
 ‘You hit the pregnant dog yesterday, reportedly, I saw you yesterday.’(EL)

The second test relates to the nature of the semantic content of *=id*. Under the modal analysis of this enclitic, it is assumed that its meaning is not part of the semantic content of the proposition, but rather is a presupposition (Faller 2002, Matthewson *et al.* 2007). As such, it is predicted that the reportative semantic contribution of it is cancellable. Example (27) also shows that this prediction holds since the sentence is infelicitous when the reportative content is cancelled.

The last test to be considered here is that of infelicity of a sentence where the proposition embedded under *=id* is known to be false. The reason for this is that the speaker is asserting that that proposition is universally or existentially true (Faller 2002, Matthewson *et al.* 2007), even when the information for it

comes from a report. Example (28) shows that this prediction is upheld. This supports the modal analysis of *=id*.

(28) Context: I am outside talking with my friend and see rain fall down:

#	ubēida	‘iutia	‘aibika	‘iutima
	ubē=id=a	‘i-ut-i-a	‘aibi=ka=a	‘i-ut-i=ma
	rain=id=3A/S	be-DOWN-PRS-N.PROX	but=VAL=3A/S	be-DOWN-IPFV=NEG
	‘It is raining, reportedly, but it is not raining’ (EL)			

Given the properties of *=id* sketched here, a simplified semantics of this enclitic is given in (25). The requirement of the information to come from a third party is built as a presupposition and the quantificational force is left underspecified.

(29) $[[\alpha\Phi]]^{w,t,c}$ is only defined if $B(c)$ is reportative.
 If defined, $[[\alpha\Phi]]^{w,t,c} = 1$ iff for all/some words in $w' \in B(c)(w, t)$,
 $[[\alpha\Phi]]^{w,t,c} = 1$

In this subsection it has been shown that the enclitic *=id* imposes a requirement that the information of the proposition embedded under it comes from a report (e.g. second-hand, hearsay, traditional story). The quantificational force of *=id* is not delimited. Finally, some standard diagnostic tests were presented that suggest that *=id* is best treated as an evidential epistemic modal.

3.3 =kuni, an epistemic clitic?

The second position enclitic *=kuni* ‘contrastive assertion’ does not lexically restrict the modal base, that is, *=kuni* is compatible with a circumstantial reading when co-occurring with the Clause+*ti* be+FLEX construction, as well as with an epistemic reading. In addition, it does not restrict the quantificational force

either. The semantics of =*kuni* has one more ingredient, it expresses a contrast between the proposition embedded under it and an opposite proposition already present in the common ground. This opposite proposition may be explicit in the discourse context or assumed by the speaker. In using =*kuni*, the speaker raises the presupposition that he has the best grounds to believe that that proposition is true. Given these semantics components, sentences having =*kuni* are usually interpreted as stronger than their bare counterparts.

The following examples illustrate typical uses of =*kuni*. In (30), the speaker has seen by himself that the event of the pipe-line breaking occurred, but other people in the community did not see that, which makes the speaker the one who has the better grounds to assert *p*. The proposition in (31) contrasts with the speaker's not going to his garden for many days. Examples (32) and (33) show instances of =*kuni* co-occurring with the circumstantial modality construction.

- (30) Context: I have seen that my cousin's pipe-line broke, but other people have not seen it and were saying that this was not the case. I say to everybody:

aín tubokunika baikiaxa.
 aín tubo=kuni=ka=a bai-ki-a-x-a
 3.POSS tube=kuni=VAL=3A/S crack-INTR-PST-3-N.PROX
 'His tube did get cracked.' (NS)

- (31) Context: The speaker is saying that he needed to go work in his garden since some days ago, but he has not been able to go there because he had to take care of his kids who go to school. Today is Friday and his kids end the school week. He still needs to go to his garden:

a pikúkëbë**kunika** *más tarde* kuani.
 a pikut-këbë=**kuni**=ka=na *más tarde* kuan-i
 3 come.out-A/S ≠ S:SE=**kuni**=VAL=1A/S later go-IPFV
 ‘When they come out (from school), I am going (to my garden).’ (NS)

- (32) Context: Students have been getting average grades, but the teacher believes they can do better. The teacher thinks that his students do not study as much as they should. The teacher also thinks that students believe that they study really hard.

mink**kunika**ina *más kirika* ‘ati *dinanti* ‘ai.
 mi=**n=kuni**=ka=ina *más kirika* ‘a-ti *dinan-ti* ‘a-i
 2=A/S=**kuni**=VAL=2A/S more paper do-FUT.NMLZ think-FUT.NMLZ be-
 IPFV
 ‘You do have to think about studying more.’ (NS)

- (33) Context: The speaker is complaining about the wood company that works in the community that has not paid them. The speaker believes that the wood company is trying to get away with not paying them anything.

a**kunika** nukën no kupionti ‘ikë.
 a=**kuni**=ka=a nukën no kupion-ti ‘ikë
 3=**kuni**=VAL=3A/S 1PL.O non-K. person pay-FUT.NMZL be.3.PFV
 ‘That mestizo (person) certainly had to pay us.’ (NS)

The quantificational force of =*kuni* is unrestricted, allowing universal and existential interpretations depending on the context. An existential interpretation of =*kuni* is given below.

- (34) Context: Norua had suffered a car accident years ago. He was not able to walk for months, but after intense rehabilitation he could walk again. The speaker has seen Norua running fast some days ago, but other people have not seen that.

Noruakunika	kuin abáti	‘ikë.
Norua=kuni=ka=a	kuin abat-ti	‘ikë
Norua=kuni=VAL=3A/S	very run-FUT.NMLZ	be.3.IPFV

‘Norua can run fast.’ (EL)

The semantics of =*kuni* expresses a high degree of certainty by the speaker, which suggests an epistemic source. However, the inability of =*kuni* to convey circumstantial readings without the presence of the [Clause+ti]_{CN} V+flex construction, which is necessary and sufficient to trigger circumstantial modality, casts doubt of its arguably modal status. An alternative analysis of this second-position clitic regards it as a focus particle in that one of its main functions is to contrast the proposition that is embedded under it to other proposition already present in the common ground. However, the specifics of the semantics of =*kuni* awaits further research.

The main properties of =*kuni*, not lexically restricting the conversational background and quantificational force and presupposing an opposite proposition, have been shown here. One way to model the contrast imposed by =*kuni* is to restrict the set of possible worlds to those worlds that are highly compatible with the current world. This could be done by making the ordering source rank those worlds that are compatible with the current world higher. The introduction of extra machinery will be required to formalized the semantics of =*kuni*. This awaits future implementation. However, notice that an alternative analysis of =*kuni* as a focus particle is still under consideration.

4 ‘Stackability’ of modals

As it could have been noticed in the previous section, in Kakataibo it is possible to have constructions with more than one modal (construction or second position clitic) in it. Kakataibo grammar allows three second position clitics, *=dapi*, *=id* and *=kuni*, and the circumstantial construction to be combined in one single monoclausal sentence. The possibilities of scope ambiguity and meaning of such sentences are left for future research. Here I make some observations about their behavior.

The combination of *=dapi* with the circumstantial construction reduces the possibility of that proposition to be true, as shown in (35). Versions of (35) having only *=dapi* or only the circumstantial construction are also accepted in the same contexts. Speakers comment that in uttering (35) one is less sure of the proposition to be true than in the mono-modal versions.

- (35) Context: The speaker finds a lake. After measuring the depth of the lake with a stick, he finds that the lake is very deep. The water is very muddy:

ënēnudapika	runun	‘iti	‘ikë.
ënē=nu=dapi=ka=a	runun	‘i-ti	‘ikë
this=LOC=dapi=VAL=3A/S	snake	be-FUT.NMLZ	be.3.IPFV

‘There might be snakes here.’ (EL)

The combination of *=kuni* with other modals make the proposition more likely to be regarded as true. For instance, in (36) the speaker is contrasting the proposition that his brother just recently used some oil to turn on the generator to the proposition of his brother having used it sometime further back in time (e.g. some days ago). In addition, the speaker is only inferring that his brother actually used the generator since he had not actually seen him using it. Thus, in uttering (36) the speaker makes the inference of his brother using the engine,

which, in turn, allows him to contrast this proposition to another one already present in the common ground, namely, his brother using the engine some days ago.

- (36) Context: The speaker’s brother is being accused of using some gallons of oil on the community’s generator when he was not authorized to do so. Speaker knows that the generator was not turned on and that his brother just went to turn it on with a gallon of oil.

reciénkuni**dapika** medio galón kastáxa.
 recién=kuni=dapi=ka=a medio galón kastan-a-x-a
 just=kuni=dapi=VAL=3A/S half gallon spend-PFV-3-N.PROX
 ‘He might have just only used half a gallon (of oil).’ (NS)

The combination of =*id* with other modals always has this modal enclitic as the highest operator. For instance, in example (30), the speaker conveys that invaders did kill other native people and the speaker came to know this through a report. In contrast, (37) cannot be used to express that third party speakers did tell the speaker of (37) that invaders killed their ancestors.

- (37) Context: The speaker is talking about how their ancestors happened to arrive to their current location. He is saying that their ancestors had to abandon their homeland due to the invasion of Spanish conquerors.

kamánokuni**iida** ‘akëxa.
 kamáno=kuni=id=a ‘a-akë-x-a
 non.K_{native.people}=kuni=REP=3A/S do-REM.PST-3-N.PROX
 ‘(They) did kill native people, they say.’ (NS)

This section presented the possibility of stacking more than one modal operator in a single monoclausal sentence in Kakataibo. The semantics of the modal operators gets further complicated due to the different possibilities in scope the modals have. A fine grained study of their interactions is left for future research.

5 Conclusions

This paper aimed to explore the semantic space of modals in Kakataibo. It has been argued here that Kakataibo modals are partly distinguished by the conversational background they convey. The whole semantic space of circumstantial modality is encoded by a construction while the epistemic semantic space is conveyed by three second-position clitics. It has also been argued that none of the modal strategies used in Kakataibo restricts the quantificational force, rather it is left underspecified. The fact that Kakataibo allows more than one modal in a sentence is not unknown (see Thráinsson and Vikner 1995 for Scandinavian languages), but it has received less attention in the literature, which motivates further study.

Some preliminary evidence to consider =*id* as an evidential modal was presented in section 3.2. However, the analysis of a more extensive set of diagnostic tests to evaluate this claim for =*id* and the other epistemic enclitics awaits future research.

Table 1. Classification of modal systems (adapted from Matthewson 2013)

	<i>Selective conversational background</i>	<i>Unselective background</i>	<i>modal</i>
<i>Selective modal force</i>	Javanese (Vander Klok 2008)	English, German	
<i>Unselective modal force</i>	Kakataibo, St'át'imcets (Matthewson <i>et al.</i> 2005)	?	

The distinction in the conversational background and the unselectiveness in the quantificational force in the Kakataibo modals are predicted by

Matthewson's (2013) typology of modal systems. This typology, as shown in the table above, points out that languages tend to encode either the quantificational force or the conversational background of the modal in a single grammatical unit. The fact that languages encode both aspects of modality has been reported in Javanese (Vander Klok 2008), although further research may show further examples. Kakataibo fits nicely in this typology since its modals are selective in the conversational background but unselective in the quantificational force. However, recall the semantics of the second position enclitic =*kuni*. It was argued here that =*kuni* did not restrict its quantificational force nor its conversational background. If this analysis of =*kuni* as a modal is on the right track, it would show an instance of an unselective marker for modal type and force.

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Daniel Valle
University of Texas at Austin
Department of Linguistics
305 E. 23rd Street STOP B5100
Austin, TX 78712 USA
davalle@utexas.edu