

The augment morpheme in Bulu

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Background on Bulu

- Bantu
- Cameroon
- 800,000 speakers (Lewis et al., 2013)
- Original fieldwork in Columbus, OH: January 2013-present

A minimal pair in Bulu

(1) *Context: Andong and Abondo keep many books on a bookshelf at their house. Abondo sees an empty spot on the bookshelf and says:*

a. (#á)∅-kálátè á-nè n-dzáj-án
AUG-CL₁-book SUB₁-COP INCH-disappear-RECP

'A book is missing.'

b. #(á)∅-kálátè à-wóʔè-bómbò vá á-nè n-dzáj-án
AUG-CL₁-book SUB₁-usually-lie here SUB₁-COP INCH-disappear-RECP

'The book that usually lies here is missing.'

What is the [ǎ-] morpheme in (1b)?

What factors account for its distribution?

What is its meaning?

Previous descriptions of [ǎ-] in Bulu

- Bates (1926): no description
- Alexandre (1970):
 - reduced form of the Proto-Bantu augment morpheme
 - syntactically determined distribution
 - sometimes translated as definite determiner
- Yukawa (1992): translated as definite determiner

Alexandre's (1970) empirical generalizations

Phonological form:

- 2 allomorphs (in the relevant dialect)

Syntactically conditioned distribution:

- Unacceptable augment: NP with no post-nominal constituent
- Obligatory augment:
 - N + subject relative clause
 - N + post-nominal demonstrative
- Optional augment:
 - N + possessive
 - N + ordinal
 - N + genitive construction
 - N + object relative clause
 - N + *-bók* 'other'

Empirical generalizations

The augment is **not obligatory** on

- N + subject relative clause
- N + post-nominal demonstrative

Occurrences of the augment are syntactically licensed but also **semantically** constrained.

Preliminary analysis:

The augment is acceptable in a context that entails the existence of

- a discourse referent that satisfies the descriptive content of the NP
- a set of alternatives satisfying certain conditions (to be described below)

1 Introduction

2 Background

- The Bantu augment
- The Bulu augment

3 Distribution of the Bulu augment

- The augment on NPs with relative clauses
 - The augment and an existence implication
 - The augment and alternatives
- The augment and demonstratives

4 Preliminary analysis

5 Conclusion

The Bantu augment: Background

The augment

- is also called the “initial vowel” or “pre-prefix” (Maho, 1999)
- is present only in a subset of Bantu languages (Maho, 1999)
- varies in form and function from language to language (de Blois, 1970)
- typically has more than one phonological realization in a given language (de Blois, 1970)

A sampling of analyses of the augment in other Bantu languages

- an optional/stylistic morpheme (Ronga: Berthoud 1920 cited in de Blois 1970; Siyeyi: Sommer and Vossen 1995 cited in Maho 1999)
- a morphological case licenser (Zulu: Halpert 2012)
- a construct form marker (Eton: Van de Velde to appear)
- a default nominal form (KiNande: Progovac 1993)
- a referentiality marker (ChiBemba: Givón 1972; Zulu: von Staden 1973)

A sampling of analyses of the augment in other Bantu languages

- a referentiality marker in some contexts and a definiteness marker in others (Dzamba: Bokamba 1971)
- a marker of specificity (isiXhosa: Visser 2008; Basaá: Jenks et al. to appear)
- a topicality or givenness marker (Luganda: Mould 1974; Kagulu: Petzell 2003)

None of these analyses account for the Bulu data.

The Bulu augment: Morphology

(2) b-òt
CL₂-person
'(the) people'

(3) bì-tétám
CL₈-okra.pod
'(the) okra pods'

- stem

- basic meaning
- grammatical gender (following Bates 1926 on Bulu and Carstens 1993, 1997 on Chichewa)

The Bulu augment: Morphology

(2) b-òt
CL₂-person
'(the) people'

(3) bì-tétám
CL₈-okra.pod
'(the) okra pods'

- class morpheme
 - agrees with stem gender (following Maho 1999 on Bantu languages generally)
 - encodes number (following Carstens 1993, 1997 on Chichewa)

The Bulu augment: Morphology

(2) b-òt
CL₂-person
'(the) people'

(3) bì-tétám
CL₈-okra.pod
'(the) okra pods'

(2') é-b-òt
AUG-CL₂-person
'(the) people'

(3') bí-tétám
AUG.CL₈-okra.pod
'(the) okra pods'

- 2 forms:

- segmental ([é-]): nouns with class prefixes of the form /∅/ or /C/
- tonal (H): nouns with class prefixes of the form /V/ or /CV/
(Alexandre, 1970)

The Bulu augment: Segmental vs. tonal

Segmental and tonal augment morphemes display different patterns of acceptability across discourse contexts.

Our claims here pertain only to the segmental augment.

Recall Alexandre's (1970) generalization: The augment is obligatorily present on an NP with a subject relative clause.

Supporting Alexandre

- (4) *Context: Maliki knows that his friend has a magical window that shows him different worlds, and he wants one like it. He tells his friend:*

mà-jì #(~~á-~~)∅-vúndù à-lítì-mà ∅-sí fǎ
1S-want AUG-CL₁-window SUB₁-show-1S CL₉-earth different

'I want a window that shows me another world'

Counter-example to Alexandre

- (5) *Context: Maliki wishes that there were other worlds that could be accessed through magical doors, like in the Chronicles of Narnia. But he knows that worlds like this don't exist. One day, as he is daydreaming, he tells his friend*

mà-jì (~~#ó~~)∅-vúndù à-lítì-mà ∅-sí fó
1S-want AUG-CL₁-window SUB₁-show-1S CL₉-earth different

'I want a window that shows me another world'

Comparing examples (4) and (5)

(4) and (5) involve opaque environments (Givón, 1972, 1978). Opaque environments

- occur under the scope of
 - negation
 - modals
 - intensional verbs (e.g. *want*, *seek*)
 - propositional attitude predicates (e.g. *think*, *believe*)
- allow the use of nominal expressions without a commitment to the existence of a referent in “the relevant universe of discourse” (Givón 1978: 294)

Minimal difference between (4) and (5):

- (4): Speaker committed to the existence of a magical window
- (5): Speaker not committed to the existence of a magical window

Opaque environment, existence commitment

- (6) *Context: Abondo wants to marry Sara, who owns many cows. He and his friends are playing a guessing game about who they want to marry. Each person is saying things about their desired spouse, and the friends have to guess who he or she is. Abondo says:*

mà-kómbò lúk #(^á-)m-ìngá á-bìlí bó-ṣàk
1S-want to.marry AUG-CL₁-woman SUB₁-own CL₂-cow

'I want to marry a woman who has cows.'

Opaque environment, no existence commitment

- (7) *Context: Abondo lives in a strange country where there is a law that women cannot own cows. He doesn't know whether women in other countries are allowed to own cows or not. However, he has always found cow-owning attractive, and he knows that if there are any places where women are allowed to own cows, he would like to go there and marry one. He tells his friend:*

mà-kómbò lúk (#ó-)m-ìngá à-bìlì bó-ṣàk
1S-want to.marry AUG-CL₁-woman SUB₁-own CL₂-cow

'I want to marry a woman who has cows.'

Empirical generalization: Commitment to existence

	AUG-N + RC	N + RC
existence commitment	✓	#
no existence commitment	#	✓

Table: Acceptability of augmented NPs with subject relative clauses in opaque environments

The use of an NP with the augment is acceptable in a context in which the speaker is committed to the existence of a referent satisfying the descriptive content of the NP in the universe of discourse (“referential” in the sense of Givón (1972, 1978), like NPs with the augment in ChiBemba), and unacceptable otherwise.

Givón's referentiality vs. definiteness and specificity

- Examples (4) and (6) provide examples of indefinite NPs with the augment.
- Example (8) involves an augmented non-specific indefinite NP.

The augment with a non-specific indefinite

- (8) *Context: Abondo has heard that there are some women who own cows in a town a few miles away, but he does not know any of them personally and has never heard their names or much about them. However, he has always wanted to be in the dairy business, and hopes that one day he will meet one of these cow-owning women and marry her. He tells his friend:*

mà-kómbò lúk #(ǎ-)m-ìngá á-bìlì bó-nàk
1S-want to.marry AUG-CL₁-woman SUB₁-own CL₂-cow

'I want to marry a woman who has cows.'

Compared to previous accounts

- Alexandre (1970) and Yukawa's (1992) assumptions that the Bulu augment encodes definiteness do not predict these data.
- Jenks et. al.'s (to appear) observation that in Basaá the presence of the augment signals specificity or definiteness cannot be extended to Bulu.
- Van de Velde's (to appear) observation that in Eton the augment has no semantic content cannot be extended to Bulu.
- Van de Velde's (to appear) claim that the Bulu augment does not encode definiteness is confirmed.

A relative clause that differentiates among relevant alternatives:

- (1b) *Context: Andong and Abondo keep many books on a bookshelf at their house. Abondo sees an empty spot on the bookshelf and says:*

#(á-)∅-kálátè à-wóʔè-bómbò vá á-nè n-dzáŋ-án
AUG-CL₁-book SUB₁-usually-lie here SUB₁-COP INCH-disappear-RECP

‘The book that usually lies here is missing.’

No relevant alternatives in the context

- (9) *Context: Jefferson has never bought kpem (a cassava leaf dish) before, and he's really interested to try it, so he buys some from Abondo and tells Emily "You have to come over and eat kpem some time." But Emily doesn't come. Eventually, Emily shows up and says "Why don't you give me the kpem that you bought from Abondo that was good?" Jefferson says:*

má-mă-dzǐ (#á-)∅-kpəm-ə ∅-tè mà-ŋgá-kùs ɔ̀bè Ábòndò
1S-TAM-eat AUG-CL9-kpem-EPEN AGR1-DEF 1S-TAM-buy from Abondo.

'I ate the kpem, which I bought from Abondo.'

Augment data: Relative clauses and alternatives

A relative clause uttered in a context in which there may or may not be relevant alternatives, depending on interpretation

- (10) *Context: Andong and Abondo own exactly one book, which they keep on a shelf in their house. One day, they come home and notice that the book is gone. Andong says:*

(á-)Ø-kálátè à-wóʔð-bómbò vá á-nè n-dzáŋ-án
AUG-CL₁-book SUB₁-usually-lie here SUB₁-COP INCH-disappear-RECP

'The book that usually lies here is missing.'

- Alternatives interpretation (✓AUG): differentiates Andong and Abondo's book from alternative books entailed to exist due to encyclopedic knowledge.
- No-alternatives interpretation (#AUG): describes the location of the one relevant, salient book entailed to exist in the context.

Another context ambiguous with respect to relevant alternatives

- (11) *Context: Some time ago Jefferson bought two different kinds of kpem, a red one and a black one. He bought one from Abondo and the other from Masungmayang. The one from Abondo was good, and he told Emily, "Oh I bought this kpem from Abondo and it was so good. Won't you come over some time and eat it?" But Emily did not come, and Jefferson ate all of the kpem. Then one day Emily stops by and says "Why don't you give me that kpem that you bought from Abondo that was good?" Jefferson says:*

má-mǎ-dzǐ (á-)∅-k̀p̀è̀m-à ∅-tè mà-ɲgá-kùs óbà Ábòndò
1S-TAM-eat AUG-CL₉-kpem-EPEN AGR₁-DEF 1S-TAM-buy from Abondo.

'I ate the kpem that I bought from Abondo.'

Empirical generalization:

	AUG-N + RC	N + RC
relevant alternatives in the context	✓	#
no relevant alternatives in the context	#	✓
ambiguous with respect to relevant alternatives	✓	✓

Table: Acceptability of augmented NPs with relative clauses, depending on the existence of relevant alternatives in the context

Eton (Van de Velde to appear):

The augment occurs only on an N with a post-nominal relative clause if the relative clause is restrictive.

Relevant alternatives in the context

- (12) *Context: There are several types/dishes of kpem in your house. You walk into the kitchen and see your husband. You ask him what he is doing, and he answers:*

mà-dzǐ #(~~ǎ~~)∅-k̀p̀è̀m-è ɲí-ná
1S-eat AUG-CL₉-kpem-EPEN AGR₉-DEM

'I am eating this kpem.'

No Relevant alternatives in the context

- (13) *Context: There is one type/dish of kpem in your house. You walk into the kitchen and see your husband. You ask him what he is doing, and he answers:*

mà-dzǐ (#~~ǎ~~)∅-k̀p̀è̀m-è ɲí-ná
1S-eat AUG-CL₉-kpem-EPEN AGR₉-DEM

'I am eating this kpem.'

Empirical generalization: The augment and demonstratives

	AUG-N + DEM	N + DEM
relevant alternatives in the context	✓	#
no relevant alternatives in the context	#	✓
ambiguous with respect to relevant alternatives	✓	✓

Table: Acceptability of augmented NPs with post-nominal demonstratives, depending on the existence of relevant alternatives in the context

The use of an NP with the augment and a post-nominal demonstrative or relative clause is acceptable in a context that entails the existence of relevant alternatives that satisfy the descriptive content of the noun but not that of the relative clause or demonstrative.

Towards an analysis of the Bulu augment

The use of the Bulu augment in an NP with a relative clause or demonstrative gives rise to two implications:

- A discourse referent exists that satisfies the descriptive content of the noun and that of the relative clause or demonstrative.
- Relevant alternatives exist in the discourse context that satisfy the descriptive content of the noun but not that of the relative clause or demonstrative.

The augment and focus

- The meaning of the Bulu augment is similar to focus in English in that it involves a set of alternatives (Rooth, 1992).
- The distribution of the augment is not identical to the distribution of prosodic focus in English:

Summary:

- The segmental augment is not obligatory for NPs with relative clauses and demonstratives, contra Alexandre (1970).
- The acceptability of an NP with the segmental augment depends on the existence of 1) a discourse referent and 2) relevant alternatives in the discourse context.

Extension

- Preliminary results from object relative clauses and possessives suggest that referentiality and alternatives can account for the distribution of the segmental augment in Alexandre's "optional" environments as well.

Theoretical Implications:

- Bulu partitions the space of nominal reference along different dimensions than in well-studied Indo-European languages (see also Barlew, Yasavul, and Clem 2014).

- Continue to investigate the extent to which the empirical generalizations about the segmental augment on NPs with relative clauses and demonstratives extend to the environments Alexandre's optional environments.
- Provide a formal analysis of the segmental augment.
- Develop an account of the tonal augment.

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