

**OPTIONAL, CONDITIONAL, AND OBLIGATORY
PRENASALIZATION IN BAFANJI**

Abstract

Under certain morphologically conditioned circumstances, modifier adjectives in Bafanji may surface with a nasal element preceding the stem-initial consonant. While this nasal prefix is optional, its presence is preferred to its absence. However, adjectives with voiceless fricative initials are *never* prenasalized in this context. In contrast, when a tense-marking nasal is prefixed to *predicate* adjectives, even voiceless fricatives may be prenasalized. A functional explanation is offered for this asymmetry, which may account for cross-linguistic norms.

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0. Introduction

Bafanji, a Bantu language of northwest Cameroon, has a productive process of total reduplication affecting adjectives. A process of optional prenasalization which applies under reduplication in overtly tensed constructions is blocked when the stem begins with a voiceless fricative. However, prenasalization of (non-reduplicated) adjectives is obligatory in overtly tensed predicate adjective constructions, even when the stem is voiceless fricative-initial.

In Section 1 I present the preliminaries: the segment inventory, and relevant segmental processes. In Section 2 I present the process of total adjectival reduplication. Then I present a morphologically-triggered process of optional prenasalization which conditionally affects the process. I consider the systematic gap in prenasalization: voiceless fricative-initial bases do not undergo the process. I additionally discuss an instance of obligatory, across-the-board, prenasalization.

1. Preliminaries

Bafanji is an Eastern Grassfield Bantu language of the Nun group in the Mbam-Nkam family, spoken in northwestern Cameroon by about 8500 people (Grimes 1988). Speakers refer to their language as Nchufie. The language is head-initial, with a rich system of tonal morphology, and a simple syllable structure. In-depth information on aspects of Bafanji

grammar may be found in Koopman and Kural 1994 (the volume in which an earlier version of this paper appears), and Jun 1994.

1.1. Segment Inventory

In (1) is the phoneme inventory of Bafanji.

(1)	p	t	tʃ	cç		i	u	u
	p^h	t^h	tʃ^h	cç^h	k^h	ɛ	ə	ɔ
	mb	nd	ndʒ	ɲɟ	ŋg		ɑ	
	f	s	ʃ	ç				
		z			ʎ			
	m	n		ɲ	ŋ			
		l		ʎ				
				j	w			

As shown in section 1.2, prenasalization is lexically contrastive only among the aspirated plosives. Following Jun (1994), contrastive prenasalized forms are considered clusters. Voiced stops may be considered redundantly prenasalized, or prenasalized plain stops may be considered redundantly voiced, although nothing of relevance hinges on either phonemicization. Vowels may be contrastively nasalized and/or creaked. The status of **v** is questionable, as it has been found in only one form. Moreover, **g** is attested in one lexical environment.

1.2 Prenasalization

As mentioned in 1.1, both voiced and aspirated prenasalized plosives are attested, both in underived and derived environments. However, prenasalized fricatives are not attested in underived environments, though may be derived under certain circumstances. Plain plosives regularly voice upon derived prenasalization. Aspirated plosives do not. In (2) are examples of underived prenasalized forms, indicating that aspirated as well as voiced plosives may follow

nasals. Redundant prenasalization is superscripted; contrastive (phonemic) prenasalization is not.

(2)	<u>contrastive:</u>		<u>redundant:</u>	
	ntó	'six'	ⁿ dʒə̂ ɪ	'egg'
	ɲcɕ ^h ɔ̂:	'mouth'	ⁿ ɡû ɲ	'glass'
	ɲk ^h i	'water'	ɲgò	'stranger'

Post-nasal hardening occurs among the glides, the liquid, and the voiced fricatives. Moreover, when **z** undergoes the process, it palatalizes as well. In (3) are some examples of post-nasal hardening. (Throughout, morpheme boundaries, when isolable, are indicated by a hyphen.)

(3)	z ^h ɲ	'dry'	-	n-dʒ ^h ɲ	'was dry'
				PAST-dry	
	ɣ ^h	'cold'	-	ɲ-g ^h	'was cold'
				PAST-cold	
	ɬ ^h	'clean'	-	n-j ^h	'was clean'
				PAST-clean	
	wũ ɪ	'amazing'	-	ɲ-ɡũ ɪ	'was amazing'
				PAST-amazing	

2. Adjectives and Adjectival Reduplication

In this section I present the process of adjectival reduplication, as well as the process of prenasalization that may conditionally apply here.

Bafanji adjectives falls into two classes. Adjectives possess either a High-Low tonal pattern (Class A), or a Low-High-Low tonal pattern (Class B).

(4)	<u>Class A:</u>		<u>Class B:</u>	
	ɕ ^h	'split'	j ^h	'tall'

wú :	'short'	wǔ :	'amazing'
púgù	'red'	pògô	'good'

The minimal and near-minimal pairs in (4) confirm the existence of an underlying tonal contrast here.

2.1 Adjectival Reduplication

Adjectival reduplication occurs in any adjective which modifies a predicate nominal.

(Throughout, reduplicated forms are indicated with "=".)

- (5) (a) à-k^há : 'it is small'
it-small
- á-jè-k^há ɾ=k^há : 'it is a small one'
it-one-small-small
- (b) à-fû 'it is white'
it-white
- á -jè fû =fû 'it is a white one'
it-one-white-white
- (c) à-zô η 'it is dry'
it-dry
- á-jè zô η=zô η 'it is a dry one'
it-one-dry-dry
- à-γô 'it is cold'
it-cold
- á-jè γô =γô 'it is a cold one'
it-one-cold-cold

ǎ̃ -m-t̃h̃ũŋ	'he will kick'	ǎ̃ -ŋ-k̃h̃ā:	'he will run'
he-FUTURE-kick		he-FUTURE-run	
ǎ̃̃ -m-t̃h̃ũŋ	'he kicked'	ǎ̃̃ -ŋ-k̃h̃ā:	'he ran'
he-PAST-kicked		he-PAST-run	

Now observe how tense marking interacts with adjectival reduplication. Note that the copula (**mbə̀**) is present in overtly tensed constructions with predicate nominals.

(7)	ǎ̃̃ ɪ-m-bə̀ -jè ŋgə̀ =ŋgə̀	'it was a cold one'
	it-PAST-copula-one-N-cold-N-cold	
	ǎ̃̃ ɪ-m-bə̀ -jè ɣə̀ =ɣə̀	'it was a cold one'
	it-PAST-copula-one-cold-cold	
	ǎ̃̃ ɪ-m-bə̀ -jè ɣə̀ =ɣə̀	'it was a cold one'
	it-PAST-copula-one-cold-cold	
	ǎ̃̃ ɪ-m-bə̀ -jè ŋk̃h̃ā̃ ɪ=ŋk̃h̃ā̃ ɪ	'it was a small one'
	it-PAST-copula-one-N-small-N-small	
	ǎ̃̃ ɪ-m-bə̀ -jè k̃h̃ā̃ ɪ=k̃h̃ā̃ ɪ	'it was a small one'
	it-PAST-copula-one-small-small	
	ǎ̃̃ ɪ-m-bə̀ -jè ŋjə̀ =ŋjə̀	'it was a clean one'
	it-PAST-copula-one-N-clean-N-clean	
	ǎ̃̃ ɪ-m-bə̀ -jè ɬɛ̀ =ɬɛ̀	'it was a clean one'
	it-PAST-copula-one-clean-clean	
	ǎ̃̃ -ɪ-m-bə̀ -jè mbə̀gə̀ =mbə̀gə̀	'it will be a good one'
	it-FUTURE-copula-one-N-good-N-good	
	ǎ̃̃ -ɪ-m-bə̀ -jè pə̀gə̀ =pə̀gə̀	'it will be a good one'
	it-FUTURE-copula-one-good-good	
	ǎ̃̃ ɪ-m-bə̀ -jè ndzə̀ ŋ=ndzə̀ ŋ	'it was a dry one'
	it-PAST-copula-one-N-dry-N-dry	
	ǎ̃̃ ɪ-m-bə̀ -jè zə̀ ŋ=zə̀ ŋ	'it was a dry one'
	it-PAST-copula-one-dry-dry	

Nasality optionally--though, according to my Bafanji consultant, preferably--appears on both instances of the reduplicated adjective. (Optional prenasalization is underlined.) The preferential presence of this nasal is discussed in 2.5.

2.3 The Exception

Despite nasality's optional though preferred appearance on predicate nominal-modifying adjectives in overtly tensed constructions, there is a systematic exception, exemplified in (8).

- (8) $\text{ǎ'' ɪ-m-bə-jè fu}^{\hat{}} = \text{fu}^{\hat{}}$ 'it was a bright one' ($*\text{ǎ'' ɪ-m-bə-jè } \underline{\text{mfu}}^{\hat{}} = \underline{\text{mfu}}^{\hat{}}$)
 it-PAST-copula-one-bright-bright
- $\text{ǎ'' ɪ-m-bə-jè fū}^{\hat{}} = \text{fū}^{\hat{}}$ 'it was a white one' ($*\text{ǎ'' ɪ-m-bə-jè } \underline{\text{mfū}}^{\hat{}} = \underline{\text{mfū}}^{\hat{}}$)
 it-PAST-copula-one-white-white
- $\text{ǎ'' ɪ-m-bə-jè } \text{ɸ}^{\hat{}} = \text{ɸ}^{\hat{}}$ 'it was a tall one' ($*\text{ǎ'' ɪ-m-bə-jè } \underline{\text{nɸ}}^{\hat{}} = \underline{\text{nɸ}}^{\hat{}}$)
 it-PAST-copula-one-tall-tall
- $\text{ǎ'' ɪ-m-bə-jè } \text{ç}^{\hat{}} = \text{ç}^{\hat{}}$ 'it was a split one' ($*\text{ǎ'' ɪ-m-bə-jè } \underline{\text{nç}}^{\hat{}} = \underline{\text{nç}}^{\hat{}}$)
 it-PAST-copula-one-split-split

Otherwise optional prenasalization is disallowed in all instances of voiceless fricative-initial adjectives.

2.4 Obligatory Prenasalization

In the following constructions, voiceless fricative-initial adjectives and verbs regularly *do* take prenasalization.

- (9) ǎ'' ɪ-ɲ-çè 'it was split' ($*\text{ǎ'' ɪ-çè}$)
 it-PAST-split
- ǎ'' ɪ-ɲ-çè 'it was tall' ($*\text{ǎ'' ɪ-çè}$)
 it-PAST-tall

nasal-stop sequences. In Bafanji, unlike any other system I am aware of, this preference for nasal-stop sequences is both limited in its scope *and* asymmetrical in its force. Preceding *voiceless* fricatives, prenasalization is fully disallowed in reduplicated modifying adjectives, while obligatory prenasalization indeed produces cross-linguistically dispreferred nasal-continuant sequences in overtly tensed predicate adjectives.

3 Conclusion

In conclusion, prenasalization in Bafanji may be *optional*, *conditional*, or *obligatory*. Prenasalization is *optional*-though preferred-on reduplicated adjectives modifying predicate nominals in overtly tensed constructions. However, prenasalization here is *conditional* on the quality of the stem-initial consonant: if voiceless fricative-initial, otherwise optional prenasalization is disallowed. Finally, prenasalization is *obligatory* when tone raising would otherwise be the sole indicator of tense, as in tense marking of voiceless fricative-initial predicate adjectives.

Appendix: Elicited Adjectives

Class A

wû :	short
lâ :	sticky
lwî	bitter
lé	clean
zô η	dry
γê	cold
γóγò	foolish
fufù	white
fuô	bright
fî	black
çé	split
púgù	red
p ^h û :	ugly
k ^h â :	small

Class B

wû :	amazing
çẽ	long/tall
zõ	itchy
pũ :	left over
pògô	good
pùpû	spoiled

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