

A NOTE ON TONE AND STRESS IN Cerman

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This paper demonstrates that Cerman has contrast, not only of the placement of stress, but it also has contrast of tone (high, low, downglide, and upglide), and a contrast of syllables with single vowels versus syllables with clusters of vowels.

Cet article montre que dans la langue Cerman, il y a plusieurs sortes de contraste; celle de placement de l'accent, celle de tonalité (haut, bas, montant, et descendant), et celle de type de syllabe, c'est à dire celles contenant des voyelles simples versus celles contenant des voyelles geminées ou diverses.

0. INTRODUCTION

Cerman is spoken by about 50,000 people who live in the southwest of Burkina-Faso, West Africa (around Niangoloko and Banfora). It has a system of contrastive tone and contrastive placement of stress. There is also contrast between syllables with single vowels versus syllables with clusters of vowels.

There are four contrastive syllable types: CV, CVV, CVC, and CVVC. In words of more than one syllable, syllables with vowel clusters are usually stressed, but vowel clusters do occur in more than one syllable of a few words.

The tones which contrast are: high, low, upglide and downglide. Only high and low tones occur on nonstressed syllables. For the most part, stress occurs on the next to the last syllable of a word, but because it does not always occur in that environment, there is contrastive placement of stress.

1. SINGLE VOWELS VERSUS CLUSTERS OF VOWELS

In Cerman, single vowels contrast with clusters of vowels. Vowel clusters may consist of geminate or diverse vowels. For the most part, clusters occur only once per word, that is, on the stressed syllable. For example:

'čálé	'rice field' versus 'čááńó	'hind'
jí'jálè	'corn, sg.' versus jí'jâânâ	'corn, pl'
'dâní	'wood, pl.' versus 'dâângù	'wood, sg.'

Examples with diverse vowels:

pār'kṹ 'millet' 'čéíŋó 'moon'

Vowel clusters may occur twice in a few words. For example:

jàà'táá 'big, high' fíí'nááŋó 'medication'

A vowel with a downglide is slightly longer than a vowel with high or low tone. For example:

'bêrè 'nut' versus 'bèré 'plot of land' versus 'bélé 'grain'.

There seems to be a kind of word timing, in that syllables are pronounced faster in a word with three or four syllables than they are in a word with two syllables. For example:

kúóká'lááŋgú 'frying pan' versus 'wááŋgú 'cold'
kũókà'làáŋgú 'fragment' versus 'bàáŋgú 'day'

2. TONE

In Cerman there is a contrast between the tones high, low, upglide, and downglide. Each syllable has a contrast of tone, but on nonstressed syllables only high versus low tone occurs.

2.1 TONE CONTRASTS

As it occurs on syllables with vowel clusters:

'čááŋgú	'rice field, eg.'	'káánũ	'broke'
'čáànǂá	'fish, pl.'	'káàngũ	'backwater, sg.'
'káásá	'to cough'	'kàálà	'to dawn'
'dèíŋó	'goodness'		

As it occurs on syllables with single vowels.

'čáŋní	'rice field, pl.'	'káya	'to cut'
'yòŋmá	'tree'	'čāŋgà	'squash, sg.'
'kòŋó	'clan of karama'	kǎlà	'to enclose'
'kòrmá	'fear'		

There is limited distribution in that we have no example of a two-syllable word with a low-low sequence.

When stress occurs on the second syllable of a two-syllable word, the following tone sequences occur.

pār'kṹ	'millet'	čǎl'mṹ	'offense'
jó'gṹ	'to think'	nǎŋ'kṹ	'garden'

Following are some pairs of words contrasting by tone only:

'čéíŋó	'moon'	súó	'go'
'čèíŋó	'wrist'	sùó	'before'
mí sǎǎ	'I buy'	'kǎlá	'to enclose'
mí sǎǎ	'I bought'	'kǎlá	'to dawn'

2.2 ALLOTONES

2.2.1 High tone becomes higher when preceding low. In the following examples, the second syllable is higher than the first.

bíčó'ldò 'girl' bíkú'ldò 'corpse'

2.2.2 High tone is lowered when following low. In the following example, the second syllable is higher than the first, whereas the last syllable is lower than the first.

í bí'sǎlbǎ 'our children'

In the following example, the last syllable is lower than the first.

dú'gǎŋní 'dirt, pl.'

2.2.3 An upglide goes higher when preceding low than it does when preceding high.

'dlínú	'to burden'	versus	'dùóŋó	'heart'
'wǎánǎ	'dry'	versus	'sǔŋó	'horse'

2.2.4 An upglide becomes a mid level pitch when it occurs between two high tones. In the following examples, the upglide tone is actualized as a mid level pitch.

í 'sǔŋó	'our horse'
ù né 'dùóŋó	'he looks at the heart'

2.2.5 A sequence of low tones is gradually lowered when preceding a pause. For example:

'kóŋkòrtlèŋó	'a saviour'
mó'lǎǎŋbǎ	'big brother, pl.'

2.3 MORPHOTONEMICS

Cerman has an extensive system of morphotonemics. A description of this morphotonemics, however, is beyond the scope of this paper. We include just a few examples:

'váǎŋó 'dog' + fá'fǎíŋó 'good' >
váfǎ'fǎíŋó 'good dog'

ká'láàngú 'pottery' + méí 'my' >
 méí ká'láàngú 'my pottery'

kónpà'fáfàngà 'good cloth' + méí 'my' >
 méí kónpà'fáfàngà 'my good cloth'

3. STRESS

For the most part, stress occurs on the next to the last syllable of a word, as in:

'yáàngá	'truth'	čí'láàngó	'parrot'
'čàngá	'squash'	jí'gàngá	'knife'
'gbàngá	'bitter'	pò'tótó	'long'
		bàbá'làngó	'bad'

There is, however, contrastive placement of stress. For example:

'čílùngù 'heritage' vs	čí'láàngó 'parrot'
ká'láàngú 'pottery' vs	
'káálùngú 'tear'	

Stress may occur on the last syllable, as in:

čà'gáá	'white'	dò'gùs	'small spoon'
fágà'jáá	'weak'	pàr'kùs	'millet'
jùgù'ríf	'bushy'	kàkú'mùs	'donkey'

Stress may occur on the first of three syllables.

'kàáčèré	'grasshopper'
'gbáásòlò	'kind of pepper'
'čáákùòlè	'grain of the baobab tree'
'díílòò	'God, heaven, rain'

A few words have two stresses:

'kàà'gbùòò	'goat'
'dàà'léí	'down there'
'núò'sùò	'number thousand'
'káámí'láàngó	'kind of rat'

4. CONCLUSION

Stress and tone are both contrastive in Cerman. There is also a contrast between syllables with single vowels versus syllables with geminate vowel clusters. Syllables with vowel clusters occur more frequently in stressed syllables than they do in nonstressed syllables. The tones high, low, upglide, and downglide all contrast on stressed syllables, but only high and low occur on nonstressed syllables.

NOTES

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Pike and Hürliemann are indebted to Edward Lauber for the analysis of the segmental phonemes which are as follows: voiceless stops p, t, k; voiced stops b, d, g; voiced and voiceless affricates č, ǰ; double stops kp, gb; nasals m, n, ŋ; voiceless and voiced fricatives f, s, h; v, z (loan words only); semivowels w, y; lateral l, vibrant r.

Single oral vowels: i, e, ɛ, a, o, ɔ, u; oral vowels which occur in geminate clusters: ii, aa, uu.

Single nasalized vowels: ɪ̃, ɛ̃, ǣ̃, ɔ̃, ŭ̃; nasalized vowels which occur in geminate clusters: ɪ̃ɪ̃, ǣ̃ǣ̃, ŭ̃ŭ̃.