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LANGUAGES OF THE GUIANAS

Edited by Joseph E. Grimes

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PREFACE

Team research is well established in science. A coordinated effort is often the best way to do the job where there is much ground to be covered, since nowhere in the world are there ever enough trained people to cover it.

In the Summer Institute of Linguistics we have worked out a pattern for field investigation of little known languages that makes use of the team concept. Usually two people are given the primary responsibility for field work in a language. They learn to speak it by living in a community where it is the main language spoken. They interact with members of the society that speaks that language in everyday life and function as mediators of information from the outside. Along with using the language they are trained to organize information on its phonology, grammar, and semantics for linguistic analysis.

The work of the field investigators is, however, supplemented by that of linguistic consultants who periodically go over the conclusions arrived at in the field with the people who made them. They criticize the work that has been done and help the field worker lay out lines of investigation to follow from that point. They also give assistance in the mundane matters of organization of field notes and presentation of conclusions. Sometimes a consultant works at a field location with the investigators for a period of time. In recent years, since there is usually only one senior consultant available for about every ten field projects of the Institute, it has become common for several investigators and their informants to meet for two to three months in a place that is removed from the ordinary interruptions of life in the bush. In such a field seminar or workshop it is possible to accomplish much.

Most of the papers in this volume came out of such a joint effort. The field work of the Summer Institute of Linguistics in Surinam got under way in the latter part of 1968, under an agreement between the Institute and the Government of Surinam. In February and March of 1969, about the time people had their feet thoroughly wet in their field work, the director of the Institute in Surinam, Joel D. Warkentin, arranged for the editor to conduct a workshop. George and Mary Huttar, Edward and Joyce Peasgood, Naomi Glock, and Catherine Rountree, all members of the Summer Institute of Linguistics, took part. Frances Tracy of the Unevangelized Fields Mission, who had begun the study of Wapishana in Guyana at about the same time

as the Surinam group began their work, was able to participate as well. Hubert and Joanne Traugh of the Pilgrim Holiness Mission in Guyana, working on Guyanese Carib, participated for the first few weeks. Morgan Jones, Ivan Schoen, and others of the Surinam Interior Fellowship of the West Indies Mission, who have made studies of the Cariban languages of the interior of Surinam, were present for a week. The papers by Jones and by Schoen's colleague Jackson were already near final form before the workshop began and were simply gone over for details during the brief time available (which even included some editorial checking by radio after Jones had to return to the Tapanahonij). All the other papers, though based mainly on observations and hypotheses made in the field before the workshop, took their present form during the workshop and include material that was elicited from informants during that period.

Special recognition for excellent handling of the logistic details of having so many people working intensively in one place goes to John and Shirley Larson of the Summer Institute of Linguistics, who took care of everything from visas to baby sitting and thereby made it possible for the participants to devote full time to the seminar. I am also indebted to George Huttar for sharing the consultation with me.

There are four layers of languages in the Guianas. First are the Cariban and Arawakan languages of the aboriginal peoples of the area, represented here by Carib, Trio, Wayana, and Wapishana. Second are the creole languages that came into prominence during that sad epoch when people from various parts of West Africa were forcibly uprooted and brought to the new world as slaves. These were the languages around which the societies of escaped slaves in the interior, represented here by Djuka and Saramaccan, crystallized; others like Sranan and the patois of French Guiana became the informal means of communication in the city-oriented societies of the coast. Third are the languages brought from Asia by contract laborers a century ago after the slaves were emancipated: Javanese, Chinese, and dialects related to Hindi and Urdu. None of this group is represented in this volume, though the changes in each since their transplanting certainly merit special study. Finally there are the languages of commerce and government, of education and wider communication: Dutch, French, English, and to a lesser extent Portuguese, Spanish, and Lebanese Arabic.

This collection is a step toward understanding that linguistic complexity. Further studies are already under way to complete the documentation of the languages on which work has just begun. The Summer Institute of Linguistics also plans to allocate teams of field workers to languages that are not yet being studied, thereby broadening the coverage.

Two of the papers in this volume cover the same area as work done on Saramaccan by Voorhoeve and on Carib by Hoff. Rather than being duplications, however, they build on the earlier studies in a significant way.

First, they give an independent corroboration of most of what the earlier authors said. Second, they call attention to parts of the earlier studies that really needed further work: the relationships among vocoids in the high to mid range, and certain restrictions on segment sequences, in Saramaccan, and the whole question of underlying versus surface phonological form in Carib. In this sense they constitute a healthy critique of the work that has gone before, confirming most of it. Other papers, like the Huttars' evidence on tone in Djuka and Glock's work on semantic relationships in Saramaccan, break new ground.

As a result of the workshop the team of field investigators have also developed a perspective on the pace of their work and on where they need to concentrate their efforts at different phases of it. This should increase the efficiency of their time in the field. Inasmuch as all of them have in mind applied linguistic projects, the teamwork approach they have worked out will help them toward those goals as well.

Joseph E. Grimes
Paramaribo, 30 March 1969

THE PHONOLOGICAL STRUCTURE OF STEMS IN SARAMACCAN

S. Catherine Rountree

Summer Institute of Linguistics

Most stems in Saramaccan¹ have the potential for occurring in isolation. They include simple stems that correspond to one phonological foot such as *muyɛɛ* 'woman', *dágu* 'dog', *wáka* 'walk', *haika* 'listen', *wɛ* 'well'; simple stems that correspond to more than one phonological foot such as *siki/si* 'six', *kalu/wá* 'lizard'; and compound stems such as *liba/-sɛ* 'upriver', *gan/-gádu* 'the great god' (/ indicates foot boundary and - morpheme boundary). They combine with affixes and clitics as in *ta-wóoko* 'working', *o-wóoko* 'will work', *si-dɛ* 'see there'. Phonological feet thus correspond to simple stems, to parts of stems, and to stems with affixes and clitics.

This paper deals with the phonological properties of simple and compound stems. Combinations of stems with affixes and clitics involve sandhi phenomena that are the subject of a separate study.

Stems are composed of one to seven syllables. Syllables of any pattern may occur at any position in the stem. The syllable patterns may be formulated as (C)V1(V2)(N). There are restrictions on the V2 slot fillers. N represents nasalization of the syllable and will be explained separately.

Fillers of the consonant slot may be charted as shown.

	labial	apical	laminal	dorsal	dorsolabial	general
nasals	m	n	nj			N
stops	{prenasalized	mb	nd	ndj	ng	
	{voiced	b	d	dj	g	gb
fricatives	{voiceless	p	t	tj	k	kp
	{voiced	f	s			
lateral	v	z				
semivowels	w	l		j		h

Contrasts between consonants are illustrated as follows:

Labial: *máta* 'mortar', *mbáta* 'deer', *báta* 'bottle', *páda* 'paddle', *finu* 'thin',
vindɛ 'throw', *wáta* 'water'.

Apical: *tɛnɛ* 'tear, rip', *tɛndɛ* 'stretch', *ɛdi* 'head', *ɛti* 'yet', *kuŋsu* 'pillow',
liNzo 'smooth', *silo* 'three-toed sloth'.

Laminal: *njuNnɔ́* 'new', *ndju* 'type of peanut', *djómbó* 'jump', *tjotjo* 'beat',
ju 'you, singular'.

Dorsal: *ngáku* 'stutter', *gádu* 'god', *kási* 'cupboard'.

Dorsolabial: *gbamba* 'meat', *kpáta* 'black and white Capuchin monkey'.

The general nasal N occurs only in syllable final position and is not in contrast with the other consonants. It is described later.

The semivowels /h/ and /w/ are frequently dropped from certain words when they occur foot initial: *wósu* ~ *ósu* 'house', *wómi* ~ *ómi* 'man', *wápa* ~ *ápa* 'star apple (*Chrysophyllum cainitao*)', *hópo* ~ *ópo* 'up', *hédi* ~ *édi* 'head'. There are other words in which they occur foot initial and are never dropped: *wáta* 'water', *wási* 'wash', *hóndi* 'hunt', *haŋso* 'handsome'. Both occur foot medially and are not dropped from that position: *agadáwɛdi* 'type of swallow', *suwáki* 'sick', *ahalala* 'centipede'.

As will be shown, a phonetic nasal-contoid sequence [NC] in which the contoid is a voiced stop is considered a unit: a prenasalized stop, symbolized generically as M. The same kind of sequence with any other contoid, however, is considered to be a sequence of two units across a syllable boundary for the following reasons. First, voiced prenasalized stops occur foot initially: *mbéi* 'make', *ndɛti* 'night', *ngáku* 'stutter', *ndju* 'type of peanut'. Other nasal plus contoid sequences do not. Second, in forms that contain no nasal plus contoid sequences, high lax muffled [ɨ] and high tense bright [i] are allophones of /i/. [ɨ] occurs only in nasal syllables (described later): /gbɛliN/ [gbɛli ~ gbɛliŋ] 'absolute indicator'. [i] occurs only in nonnasal syllables: /guli/ [guli] 'swallow'. In forms in which [ɨ] or [i] precede nasal plus contoid sequences, [ɨ] occurs only when the contoid that follows is not a voiced stop: /viNtu/ [vɨntu] 'wind'. [i] precedes sequences of nasal plus voiced stop: /vindɛ/ [vɨndɛ] 'throw'. In other words [ɨ] behaves exactly as it would be expected to behave in a nasal syllable, whether it is followed by another syllable or not, while [i] has the properties that are characteristic of the vowel /i/ in nonnasal syllables. The nasal that follows the bright allophone [i] of /i/ is by this argument part of the onset of the next syllable. Third, native speakers indicate a syllable break before prenasalized stops /mb nd ndj ng/ but after the general nasal in /Np Nt Nk Ns Nz Nj/.

Since Saramaccan has no consonant clusters, the double stops /gb/ and /kp/ function as single units. They have as allophones [gb] in free variation with [gw] and [kp] in free variation with [kw]: /gbamba/ [gbamba ~ gwamba] 'meat', /kpáta/ [kpáta ~ kwáta] 'black and white Capuchin monkey'.

Voorhoeve (1959) labels these phonemes as implosives without going into further details about their phonetic makeup.

Voorhoeve (1959, 1961, 1964, Voorhoeve and Donicie 1963) studied the Lower Surinam River dialect of Saramaccan. This study is of the Upper Surinam River dialect. Although it agrees essentially with his conclusions, there are some differences. For example, he has the same number of vowels, but different phonetic norms. The Upper Surinam vowels are:

		front	central	back
high	{ bright	i		u
	{ muffled	[i]		[u]
mid	{ muffled	e		o
	{ bright	ɛ		ɔ
low			a	

In the V1 slot of the syllable there is clear contrast in nonnasalized between high bright i, mid muffled e, and mid bright ɛ: tii 'steer', téi 'take', léi 'learn', léi 'ride', biifi 'letter', teégi 'slowly', peégu 'nail'.² There are also relationships of free variation among these vowels which will be discussed under archiphonemes.

High muffled [i] occurs in nasalized syllables, as already mentioned, whereas the high bright [i] never occurs in nasalized syllables: gbɛliN [gbɛli ~ gbɛliN] 'absolute indicator', guli [guli] 'swallow', viNtu [vintu] 'wind', vɛnde [vɛnde] 'throw'. The mid muffled [e] also appears in nasalized syllables: sɛNsi [sɛsi ~ sɛnsi] 'since', peɛNja [pɛɛʃã] 'piranha'. For these reasons [i] must be an allophone of /i/ rather than of /e/ as in the lower Surinam dialect.

There is also clear contrast in nonnasalized syllables between high bright u, mid muffled o, and mid bright ɔ: gúdu 'rich', kóti 'cut', kòtɔ 'cold', dúngu 'dark', tóNpi 'thorn', tɔngo 'tongue'. There are also relationships of free variation between u and o which will be discussed under archiphonemes.

The low central a is neither bright nor muffled and has only one allophone: da 'give', fáa 'cut down', wáka 'walk', paabi 'saucer', baáa 'brother'.

The high muffled /u/ is treated here as an archiphoneme because of its special relationship to u and o. It occurs in CVN.CV and CV.MV stems. In the environments l-N, l-M there is no contrast between u and o, and the phone [u] occurs consistently: lúNtu [luntu] 'around', lúngi [lungi] 'long'.³ In the environment s-N, s-M there is contrast between u and o, as in súndju [súndju] 'dirty', sóndo [sóndo] 'without', but free variation and no contrast between [u] and [o], sùni [soni ~ suni] 'thing',⁴ sùnde [sónde ~ sùnde]

'Sunday'. In other environments there is free variation between [u] and [ɥ] in contrast with [o]: mǔndu [mǔndu ~ mǔndu] 'world', moNngó [mǒŋgó] 'proper name'. In other stems u and o occur with no free variation involved: búngu [búngu] 'pitcher', kúNsu [kúnsu] 'pillow', sóndo [sóndo] 'without'. The archiphoneme /ɥ/ is written to indicate the various ranges of free variation and the lack of contrast in l-N, l-M.

A similar free variation occurs among the front vowels in nasalized syllables CVN, CVŋ, and before prenasalized stops CV.MV: sǐN [sǐ ~ sē ~ sē ~ sǐŋ ~ sēŋ ~ sēŋ] 'shame', lǐNzo [lǐnzo ~ lénzo ~ lénzo] 'smooth'. In other stems the front vowels occur with no free variation involved: siNkíi [sǐŋkíi] 'body', peéNja [pēēǵá] 'piranha' fēNse [fēse ~ fēnsē] 'window'. /i/ is written to indicate free variation among front vowels.

Free variation with syllable final nasals will be discussed under nasalization. The archiphonemes /i,ɥ, N/ represent these ranges of free variation that are distinct from phonemes that show no such variation.

The second vowel of a syllable is either a repeat of the first vowel or a dissimilar high vowel. The high back vowel can follow only central and back vowels in the same syllable: tí 'steer', teégi 'slowly', peégu 'nail', paabi 'saucer', doŋgo 'intoxicated', koosu 'clothes', fuúku 'early', léi 'learn', léi 'ride', báí 'buy', bóí 'cook', búí 'chain', páu 'tree', kǒusu 'socks', foóu 'flood'.⁵

Stems with three consecutive vowels are three syllables. Native speakers classify them rhythmically with three syllable stems: baáa [ba.á.a] 'brother', guúuN [gū.ū.ū] 'green', are like kumútu 'come out' in rhythm.

Every vowel carries one tone. Two tones, high and low, are contrastive: tǐmbǐ 'build', sǐmbǐ 'people', lǐmbǐ 'lick'. In long syllables the tones may be HL, káíma 'alligator', HH matúútúí 'spotted sandpiper', LH noítí 'never', or LL peiká 'fix'.

In the most common stem pattern, one and only one syllable has a high tone: wáka 'walk', fuúku 'early', sǐkí/sí 'six', apesína 'orange'. A less common stem pattern has no high tone: vuNvuN 'hummingbird', logoso 'turtle', lǐgǐdǐ 'lie', sǐmbǐ 'people', gbamba 'meat', maisi 'electric eel'. A third stem pattern has more than one high tone: matúútúí 'spotted sandpiper', búmbúu 'state of well-being'.

The stress pattern of stems can be predicted according to the following rules. (1) The first long syllable in each foot of the stem is stressed. (2) If there is no long syllable, the next to the last syllable in the phonological foot is stressed. In simple stems that correspond to more than one phonological foot, the first stress is the heaviest. Compound stems remain to be investigated. Two-syllable stems with a LH tone pattern have no set

pattern; the stress varies freely between the syllables: 'bɛbɛ ~ bɛ'bɛ 'drink', 'guli ~ gu'li 'swallow', 'kini ~ ki'ni 'knee'.

Nasalization is primarily a feature of the syllable. It is manifested as a general nasal /N/ and as the archiphoneme /N/. /N/ occurs as a final nasal consonant before /p, t, k, z/ that takes the same point of articulation as the following consonant: taáNpu [taámpu] 'stand', lụNtu [lụntu] 'around', siNki [siŋki] 'body', lánNza [láanza] 'spear'. In all other environments it occurs only as nasalization of a vowel: waN [wã] 'one', djaNpanɛNsi [djampanɛsi] 'Japanese'. /N/ includes free variation between a final consonant and nasalization of a vowel together, or nasalization of the vowel only: faáNsi [fãasi ~ fãansi] 'French', taN [tã ~ tãŋ] 'stay'.

Nasalization extends over consonants and nasalizes the next syllable when the consonant is /j/ or /nj/: peéNja [pɛɛʃã] 'piranha', muNnjá [mũnjã] 'wet', but muNngá [mũngã] 'bracelets'.

FOOTNOTES

¹Saramaccan is spoken by twenty to twenty-four thousand Bush Negroes who live along the Surinam and Saramacca rivers in the central interior of Surinam. The data were gathered in Paramaribo with the aid of a Saramaccan speaker, Mandó, from March to September 1968, and while living in the paramount chief's village from October of 1968 to January of 1969. The other principal language helpers were Edme (proper names deviate from the regular phonological pattern), Měno Muyeɛ, and Faánsi. In doing this study I have corroborated Voorhoeve's work and refined it in certain details. My purpose is to lay the groundwork for a complete study of Saramaccan.

²Vowels are described as bright and muffled because pharyngeal cavity shape rather than tongue height is the parameter on which they contrast consistently. e, i, o, u are usually more high and tense than ɛ, ɪ, ɔ, ʊ. For the distinction between bright and muffled see Sapir 1931, Chomsky and Halle 1968, Pike 1966, and Ladefoged 1964.

³These words are written with an o in the practical orthography: lóngi 'long', lóntu 'around', according to the choice of native speakers literate in Dutch.

⁴suni 'thing' is exceptional in that it fits neither the CVN.CV nor the CV.MV syllable pattern within which /ʊ/ alternates with u and o. It is a free variant, however, of sundí, which does fit the pattern.

⁵The solution of writing the last front vowel in a syllable as a /y/, the last back vowel as /w/, and a repeat vowel as /h/ was considered. But since the second vowel carries tone, this solution was rejected.

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