PHONEMES OF THE GUARANÍ LANGUAGE

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0. INTRODUCTION

Bolivian Guaraní is the language of some 15,000 Indians located in the south-eastern part of the country. According to an estimate based on the comparison of word lists, the Guaraní of Bolivia and that of Paraguay are less alike than Spanish and Portuguese.

There are three main areas of Guaraní in Bolivia, differing geographically and linguistically — the eastern, central and western. The eastern area is that of Isoso, where the people live along the course of the River Parapetí. The central and western areas lie in the foothills of the Andes between the River Grande to the North and the River Pilcomayo to the South. Linguistically the eastern and central areas are similar, and differ somewhat from the western area, possibly due to the fact that the latter area is separated from the others by several foothill ranges of the Andes.

The data on which this paper is based were collected during a period of residence of approximately two years in the village of Caraguatarenda, located in the central dialect area on the road between Camiri and Santa Cruz, about 100 kilometers from Camiri.

1. PHONEMES

There are fourteen consonant phonemes: $/p t k ? r g^w b s č h m n ñ ŋ/.$

	Bilabial	Alveolar	Alveo-pal.	Velar	Glottal
Voiceless stops	р	t		k	2
Voiced stops		r		gw	
Fricatives	b	S	č		h
Nasals	m	n	ñ	ŋ	

There are twelve vowel phonemes: /i e a o u i ĩ ẽ ã õ ũ i/.

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	Front		Central		Back	
High	i	ĩ	i	ĩ	u	ũ
Mid	e	ẽ			0	õ
Low			a	ã		

There is a phoneme of stress: '.

1.1. Consonants

Bilabial consonants are: stop /p/, fricative /b/, nasal /m/: péru 'you bring it', ópa 'it is finished', boi 'quickly', óba 'six', méru 'fly', moi 'snake'.

Alveolar consonants are: stop /t/, flap /r/, fricative /s/, nasal /n/: téko 'blame', *iti* 'rubbish', réke 'you sleep', réru 'you bring it', osiríri 'it slips', sípe 'hoe', néko 'your field', néru 'your father', *ãníra* 'bat', nétī 'your nose'.

Alveo-palatal consonants are: fricative $|\check{c}|$, nasal $|\tilde{n}|$: \check{ce} 'I', \acute{cepo} 'my hand', $o\check{cir}\check{iri}$ 'it melts', \tilde{ne} 'again', $\tilde{n}\check{e}ti$ 'gnat', $\check{n}\tilde{n}\tilde{a}$ 'demon'.

Velar consonants are: stop /k/, labialized /g^w/, nasal /ŋ/: k*ise* 'knife', óka 'patio', akúti 'jochi', g^wíra 'bird', óg^wa 'he buys it', yóte 'cicada', ãyúña 'rat'.

Glottal consonants are: stop /?/, fricative /h/: δPa 'he falls', $\tilde{n}epera$ 'firewood', he sa 'his eye', δho 'he goes'.

1.2. Vowels

1.2.1. Oral vowels

Front vowels are: high /i/, mid /e/: *ipo* 'his hand', *iñati?i* 'his boil', *épo* 'ride!', *eg^wáta* 'walk!'.

Central vowels are: high |i|, low |a|: *iñatíPi* 'his shoulder', *ibíti* 'hill', *ag^wáta* 'I walk', *ópa* 'it is finished'.

Back vowels are: high /u/, mid /o/: čéru 'my father', *ibitu* 'wind', čéro 'my house', ópo 'he rides'.

1.2.2. Nasalized vowels

The nasalized vowels /I \tilde{e} \tilde{i} \tilde{a} \tilde{u} \tilde{o} / correspond in point of articulation to their oral counterparts.

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Words showing contrasts of oral and nasalized vowels are: epúka 'laugh!', ẽpú?a 'get up!'; íta 'stone', ítã 'shell'; ĩbíti 'hill', ĩbítĩ 'mist'; ópo 'he jumps', ốpẽ 'it is broken'.

1.3. Consonant allophones

All the voiced consonant phonemes have two allophones — one occurs preceding oral vowels, the other preceding nasalized vowels.

Allophones of /b/ are [b], [b]: ibiti [ibiti] 'wind', ibiti [ibiti] 'mist'.

Allophones of /r/ are [r], [r]: iro [iro] 'it is bitter', irũ [irũ] 'other'.

Allophones of $|g^w|$ are [gw], $[\eta \tilde{w}]$: $\delta g^w e$ [$\delta g w e$] 'it goes out', $\delta g^w \dot{e} r \tilde{e}$ [$\delta \eta \tilde{w} \dot{e} r \tilde{e}$] 'he vomits'.

Allophones of /m/ are [mb], [m]: õmoái [õmboái] 'he erases it', õmõấĩ [õmõấĩ] 'he scatters it'.

Allophones of /n/ are [nd], [n]: $\tilde{o}m\tilde{o}n\delta o$ [$\tilde{o}m\tilde{o}nd\delta o$] 'he breaks it', $\tilde{o}m\tilde{o}n\delta r \delta$ [$\tilde{o}m\tilde{o}n\delta r \delta$] 'he picks it up'.

Allophones of /ñ/ are [j], [ñ]:1 áña [ája] 'I approach', ấñã [ấñã] 'demon'.

Allophones of $|\eta|$ are $[\eta g]$, $[\eta]$: $\tilde{o}m\tilde{o}\eta\acute{e}ta$ [$\tilde{o}m\tilde{o}\etag\acute{e}ta$] 'he reads', $\tilde{o}n\tilde{e}\tilde{e}\eta\acute{a}t\tilde{a}$ [$\tilde{o}n\tilde{e}\tilde{e}\eta\acute{a}t\tilde{a}$] 'he scolds'.

1.4. Vowel allophones

Vowels preceded by a voiceless consonant occurring before a pause vary from voiced to voiceless.

In words of one syllable which contain only one vowel the vowel is lengthened.

/a \tilde{a} / have the phonetic qualities [æ $\tilde{æ}$] when preceded by $/\tilde{n}$ / or when occurring between two front vowels: $\tilde{n}ai$ [jæi] 'thornbush', $m\tilde{c}\tilde{i}\tilde{a}\tilde{e}$ [mīčī $\tilde{x}\tilde{e}$] 'child'.

Mid and high back vowels vary from closed to open positions.

2. SYLLABLE PATTERNS AND THE STRESS PHONEME

The syllable patterns which occur are: V, VV, CV, CVV, CVVV: *ópo* 'he rides', *timi*áo 'trousers', Tápe 'road', *tu*Páo 'church', KUAE 'this'.

Except for borrowings from Spanish, there are very few words which contain closed syllables. Such syllables never occur word finally. The only consonant phonemes which occur syllable finally are nasals, and ¹ There is a third allophone of $/\tilde{n}/-[\tilde{n}\tilde{j}]$ — which occurs only in one word: $\tilde{a}\tilde{n}db\tilde{e}/\tilde{a}\tilde{n}dbe/\tilde{a}\tilde{n$

there is usually an alternative pronunciation of the word, in which the syllable final consonant is omitted: $t\acute{u}mp\ddot{a}$ 'God', $t\acute{e}nt\ddot{a}/t\acute{e}t\ddot{a}$ 'town'.

Lower vowels followed by higher vowels form ascending diphthongs. A high back vowel followed by any other vowel, a high front followed by low, and a high central followed by high front, form descending diphthongs. Lower vowels followed by higher vowels and preceded by a high front or high back form triphthongs.

The usual position of word stress is determined by the type of syllable occurring finally in the word.

For a final syllable containing a single vowel or descending diphthong, the usual position of word stress is on the penultimate syllable. For a final syllable containing two same vowels, an ascending diphthong, or a triphthong, the usual position is on the ultimate syllable: *tápe* 'road', *ikua* 'its hole', *ósii* 'he runs', *oipfi* 'he grasps it', *ipói* 'it is heavy', *hokuáe* 'that'.

There is a limited number of words in which the occurence of stress contrasts with that of the usual pattern. Some examples are: *ãmué* 'other', *môkôĩ* 'two', *oñókuai* 'he commands him'.

Antepenultimate stress is rare.

Examples of stress on the ultimate, penultimate, or antepenultimate syllable are: kãrãmué 'a long time ago', kãrúmue 'yesterday', iấrãmue 'on top of it'.

1.	man	/kũĩmáe/	15. firewood	/ñepé?a/
2.	woman	/kúñã/	16. ash	/tãnímu/
3.	people		17. smoke	/tãtấtĩ/
4.	her husband	/Ímẽ/	18. sky	/ára/
5.	his wife	/hẽmiréko/	19. rain	/ấmã/
6.	his father	/tu/	20. sun	/kuarái/
7.	his mother	/íči/	21. moon	/ñási/
8.	child	/mĩčĩấẽ/	22. star	/ñasitáta/
9.	old man	/néči/	23. it thunders	/hiápu ára/
10.	water	/i/	24. lightning	/ãmãbéra/
11.	river	/i/	25. rainbow	/ñíʔi/
12.	house	/o/	26. day	/ára/
13.	roof	/opitía/	27. night	/pítũ/
14.	fire	/táta/	28. earth	/ibi/

A SAMPLE VOCABULARY OF THE GUARANÍ LANGUAGE

29.	tree	/ibira/	48.	his stomach	/hie/
30.	its leaf	/ho/	49.	his back	/ikúpe/
31.	its root	/hápo/	50.	his shoulder	/iñatí?i/
32.	canoe		51.	his arm	/iñiba/
33.	paddle		52.	his upper arm	/iñibáipi/
34.	fish	/pira/	53.	his elbow	/hẽnibắŋa/
35.	his tongue	/íkũ/	54.	his hand	/ípo/
36.	his mouth	/iñúru/	55.	his finger	/ĩpõấkã/
37.	his lip	/hếme/	56.	his fingernail	/ĩpõấpẽ/
38.	his tooth	/hãĩ/	57.	his leg	/í?u/
39.	his nose	/ítĩ/	58.	his knee	/itá b a/
40.	his eye	/hésa/	59.	his shin	/ĩtīmấkã/
41.	his ear	/ĩnấmi/	60.	his foot	/ípi/
42.	his head	/ĩñákã/	61.	his toe	/ĩpĩsã/
43.	his forehead	/hesiba/	62.	his skin	/ipíre/
44.	his hair	/i?a/	63.	his bone	/ĩkấgʷẽ/
45.	his chin	/hãñíkã/	64.	blood	/túg ^w i/
46.	his beard	/hẽnibá/	65.	heart	
47.	his neck	/iñáñu/	66.	lungs	

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