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Otomí Phonology and Orthography

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## NOTES AND REVIEWS

### OTOMÍ PHONOLOGY AND ORTHOGRAPHY<sup>1</sup>

H. RUSSELL BERNARD

In a recent article Hensey (1972) pointed out some difficulties in preparing an Otomí text and in teaching Otomí (presumably to non-native speakers). He noted that there is some disagreement on Otomí phonology, notably in the area of tone, nasalization, and stops. Consequently, there are variations in orthography. Since I have been preparing Otomí texts for publication (Tlalocan, forthcoming), I have had to cope with the problems cogently raised by Hensey. In this paper I present a basic phonology and orthography of Mezquital Otomí, such that these difficulties are minimized.

Consider the phonology:

fricatives are simple stops. Thus /mφ/→[mpφ]; /nθ/→[ntθ]; /ns/→[nc]; /nš/→[nč]; /nx/→[nk<sup>x</sup>]; /nz/→[nξ]; /mβ/→[mb]; /nδ/→[nd]; /nγ/→[nɣ]; /<sup>?</sup>β/→[<sup>?</sup>b]; /<sup>?</sup>θ/→[<sup>?</sup>t<sup>θ</sup>]; etc. /<sup>?</sup>m/→[<sup>?</sup>b].

Unlike previous analyses, this phonology does not assume aspirated stops. Instead, I have postulated voiceless fricatives as phonemes, with aspirated stop allophones and no UNDERLYING VOICED STOP PHONEMES in the language. The phonetic occurrence of /b/ is accounted for as /<sup>?</sup>m/ or /<sup>?</sup>β/. Indeed, for many native speakers the clusters [<sup>?</sup>m] and [<sup>?</sup>b] occur in free variation, with the /m/ of the former being clearly distinguished. The lamino-alveolar affricate /č/ is phonemic only in recent Spanish

#### CONSONANTS:

Figure 1

	bilabial	apico-dental	apico-alveolar	lamino-velar	dorso-velar	glotta
Stops	p	t	c	(č)	k	ʔ
Fricatives						
Vls.	φ	θ	s	š	x	h
Vd.	β	δ	z	(ž)	γ	
Nasals	m	n		ñ		
Lateral			(l)			
Flap			r			
Glides	w		y			

#### VOWELS:

	Front	Central	Back
High	i	i	u
Mid	e	Λ	o
Low	æ	a	ɔ

#### TONES:

High and Low (ḡ, ḡ) with a phonetically rising tone (ḡ) which may be represented as clusters of geminates /ḡ<sub>1</sub> ḡ<sub>2</sub>/, /ḡ<sub>1</sub> ḡ<sub>1</sub>/.

Fricatives, voiced and voiceless take stop allophones following nasals or glottal. The allophones of the voiceless fricatives are affricates, while those of the voiced

loans, and is otherwise confined to phonetic occurrence as in /nš/→[nč]/mánša/, *ear of corn*. Similarly, /ž/ and /l/ are phonemic only in loan words.

<sup>1</sup> The orthography presented here grows out of research on Otomí folk tales, supported by the Phillips fund of the American Philosophical Society. Earlier work on the phonology was supported by the Department of Anthropology, University of Illinois.

Nasalization has apparently declined in modern times and may be in the process of becoming a strictly phonetic feature. I have argued this elsewhere (Bernard 1967). Nasalized /a/ may persist as phonemic, but

(as Hensey also noted) it appears as nasal /ɔ/ in the speech of many Otomies. Since /ɔ/ never occurs as non-nasal, nasalized /a/ may be dispensed with in current orthography and may be replaced by /ɔ/. Historical and current ethnographic evidence corroborates this position (Bernard 1970).

The tones have been debated since 1948 (Sinclair and Pike 1948). My analysis (1966) showed how a series of ordered lexical rules could account for all phonetic tone with a single tone marker (high-tone). Since then, considering the remarks by Wallis (1968), I have reexamined my analysis and find two things wrong with it:

1) I argued that there were no cases of vowel clusters which did not exhibit a rising tone. I have since found several clusters such as /tái/ *Buy!* vs. /tài/ *market place*. I would write the former item /tái/ consistent with the rule that only the first high tone in a word need ever be marked, unless it is the final tone, in which case it is left blank. 2) I argued that all lexical items of more than one syllable end in high tone, unless morpheme boundaries were involved. In discourse, however, there are numerous exceptions to the rule. Wallis argued that intonation patterns were so strong that they overshadowed the rules for marking tones on words uttered in isolation. Intonation is notoriously subject to stylistic, artistic, and regional dialectic variation among speakers. Indeed, in a test I found several variations in tone pattern when different individuals uttered the same sentence. However, the similarities and consistencies were strong enough to warrant a further hypothesis: in addition to (not in replacement of) the ultimate rules of stylistic variation, there exists a set of discourse rules governing the distribution of tones in rapid speech. The lexical rules I posited in 1966 are still valid; however, a set of syntactic rules apparently operates in discourse AFTER the lexical rules have been applied. A further, more subtle set of intonational and stylistic rules may be operating after that. The syntactic rules

are currently under investigation and have been presented orally in tentative form at the AAA Meetings, Nov., 1972. Meanwhile, even for rigorous orthographic purposes, marking two tones (high and low) is quite sufficient. A sample text is included to illustrate this.

Following is a rewriting of the phonology, using symbols appearing on a standard Spanish keyboard.

Figure 2

	p	t	ts	t̄s	k	'
	f	th	s	š	x	h
	b	d	z	ž	g	
	m	n		ñ		
			l			
			r			
	w		y			
VOWELS						
		i	+	u		
		e	v	o		
		ae	a	c		
TONES						
			high	ṽ	low	ṽ

This orthography was developed with the help of native speakers, to enable Otomí to be written easily. An informant was taught to read and write Otomí using the modified IPA format shown in fig. 1. After he was completely comfortable with the symbols used, I asked him to look at a typewriter and devise an alphabet that would account for the original phonology. The orthography in fig. 2 resulted from this experiment. Originally he chose the question mark to represent glottal, but this was changed because of the confusion it caused in sentences where interrogatives occurred. The plus sign seemed a logical replacement for the barred /i/ and the /v/ was selected for its apparent relationship to /Δ/. The low back vowel was originally a right-hand parenthesis but it was changed because it was too tall for tone to be marked. The /c/ took its place and the apico-alveolar affricate was replaced by /ts/. The /č/ in Spanish loan words was originally replaced

by /ch/ to conform to Spanish. However, with the use of /c/ for /ç/ we were forced to render phonemic /č/ as tš. This phonemic /č/ is distinguished from the very common phonetic [č] which occurs when /š/ follows nasal. (See above rules of allophonic variation).

With those modifications we produced an orthography which could account for the native intuition of Otomí speakers, allow for phonetic variation (allophonic and dialectic) and be easily written. For example, various dialects make the aspirated stop allophone of /θ/ more distinctly than others.<sup>2</sup> The /th/ allows for this. For purposes of consistency, we considered using /ph/ and /kh/ for /θ/ and /x/. But aspirated /k/ and /p/ never occur except as a function of the nasal acting on /x/ and /θ/.

The tones present another problem. I was never able to get informants to pay much attention to tones in writing Otomí. For teaching Otomí to non-native speakers, or for publication of texts which will be read and analyzed by linguists, the tones are of some importance. Native speakers, however, do not require them and consistently neglect to mark tones.

This raises the question of who an orthography is for. We have purposely avoided using symbols (with the except of the apostrophe for glottal) currently used by the SIL in writing Otomí. SIL linguists have been in the Mezquital for several decades. The national workshop of the Institute is in Ixmiquilpan itself. After 20 years of labor, the

<sup>2</sup> Variation in speech is very marked in Mezquital Otomí. There are at least 3 major geographic dialects and extreme variation based on sex, generation, and amount of Spanish controlled by the speaker. In fact, differential capability in Spanish probably accounts for most of the variation based on sex and generation. According to the official census of 1970, approximately 64% of all monolingual Otomies are women. My own samplings indicate this may be very conservative. In addition, about two thirds of all Otomies over 40 never completed the first three grades of school where Spanish is taught.

entire Bible has been published in Otomí (and like all such efforts it is a magnificent piece of translation). The SIL has published dictionaries of Otomí, collections of folk stories, and basic grammars. They have helped in the conversion to Protestantism of perhaps several thousand Otomies, whom they have encouraged to become literate in their own language so that they might read the Bible themselves. To aid the conversion process, and for other reasons (including the preservation of native languages) the SIL has developed a series of texts for the 6 primary grades, so that Otomí children might learn to read and write Otomí simultaneously with Spanish. But for all of this effort there are few (if any) Otomies genuinely literate in their own language (not counting a handful of trained linguistic informants). On inquiry, many people said they were literate in Otomí; what they usually meant, was that they could FOLLOW the reading of a passage from the Bible or a hymnal. School children (5th and 6th graders) could read phrases and sentences from the Otomí workbooks but were not able to distinguish the vowels and other symbols used. They looked at words and used their intuition to guess at the pronunciation from the presence of familiar Roman letters. I talked with bilingual school teachers, local government development specialists, community leaders, school children in various grades, SIL workers, and a number of adult Otomies in Protestant as well as Catholic villages. Four reasons emerged to explain the lack of progress in fostering literacy in Otomí:

1) There was no easily available body of literature for Otomies to read (besides the Bible, the workbooks and a scattering of short folk stories). Otomí oral literature is extremely rich but so far remains exclusively oral. Many of the most widely told and popular stories are either lengthy and/or bawdy, two factors mitigating against their finding their way into print. One school teacher asked why a child should learn Otomí

when there is nothing for him to read after he finishes the school text.

2) The available literature is a product of the SIL or SIL-government cooperative publication. Some people said they avoided literacy in Otomí because "only Protestants do it." Rather ironically, a Protestant Otomí observed that since the SIL alphabet had been used to write the Bible it was now sacred and should not be used for anything else.

3) Many informants said that the alphabet used in the Bible was too complicated, or too esoteric. One of the government development specialists said that it would be easier to 'sell' literacy and produce low cost mimeo materials if Otomí could be written on a standard Spanish keyboard.

The present orthography was designed to resolve the three difficulties just mentioned. A fourth problem remains. It is the most serious obstacle to the spread of literacy in Otomí or any other native language in Mexico; and it is not resolvable by linguists. Most of the community leaders (Otomies) with whom I spoke scorned the idea of literary Otomí. They encouraged their constituents to become literate in Spanish, to become part of the national culture of Mexico. They felt that learning to read and write Otomí would only retard the progress they sought for their people. They were convinced that native languages were dying and outmoded, and that there was little to be gained from their glorification by pretending they were worthy of literacy. The PROMOTOR program, for example, is indicative of this attitude. In an effort to spread literacy through CASTELLANIZACIÓN, the government has supported the development of a cadre of indigenous 'promoters'. Indians with basic skills are paid to help others learn to read and write Spanish. The idea is that if an Indian is approached by someone who speaks his native language, he will be more inclined to listen and to follow the example set by the promotor. The notion, of course, is correct and effective. Its implementation, however,

is at the expense of the native language, though this was not a directly stated goal of the original program. The 'promotores' and the 'maestros bilingües' (bilingual school teachers with actual teaching credentials in whose jurisdiction the 'promotores' work) use the SIL workbooks but they do so in a paternalistic manner that makes literary Otomí a quaint curiosity and discourages it as a serious skill to be acquired. These young community leaders have accepted the national cultural myth that indigenous languages are 'dialectos' (of what remains unclear) rather than 'idiomas' (fully fledged tongues). It is to these native community leaders that villagers look for guidance in the process of acculturation and economic progress.

There is little chance in the face of such odds that Otomí will soon become a widely written tongue with a nascent written tradition. But it is likely that three or four decades from now Mexico will have accomplished its goal of cultural homogenization sufficiently for economic progress to be assured for its diverse populations. It is not unrealistic to assume that at that time Otomies and others will begin to look back on their cultural roots, just as many peoples in the U.S. are currently doing. It is thus not inappropriate for us to encourage both the use of standard, easily produced orthographies for as many of the indigenous languages of Mexico as possible, and the publication of as much indigenous literature as possible.

#### Sample Text

#### (Otomí Example)

1. rc maéxwá bi má. 2. di yóho/ ko ré/ ámigo pa dc mats'i dc/ 'yaetrc.xwá./3. i bi nthæwi rc/ rc k'eñc./ 4. hín bi hópi bi/ bi hyó 'ná 5. rc/ nk'aahni o rc tirador/ bi hñékwábi./ 6. nep+ bi maa./ 7. thógi./ 8. bi nthæwi rc/ rc ñ'oi./ 9. e lo mízmo hín bi hópi bi hyó./ 10. i bi./ 11. yaa bi zóp±'c./12. i bi sígi bi sígi bi má/ há yc bonthi./ 13. bi nthæwi rc nš+ni./ 14. lo mízmo hín bi/

hópi bi hyó./ 15. bi/ má bi maabyae 16. bi/ zoop+ rc n̄s+ni./17. nubyae bi nthagwi rc xwá./ 18. maa drc k'aahni ko rc bvshna per nu'c hín bi thópibi./ 19. yaa nú'c bi pér-donabi./ 20. bi zóp+./ 21. pe yaa bi bvv rc kwae nú'c rc/ tirador./22. ngé'c ge/ hín gi hópi dc k'aahni./ 23. nubyae bi 'wege nú'c rc/ tirador./ 24. ha nu'c zí ñ'v̄hv bi sigi bi maa nú'c tó'c/ bi ñéngc núyc zu'we./ 25. i yaa bi má bi má bi/ sígi bi k'ñc bonthi bí./ 26. i bi/ i bi nthawibyae rc k'eñébyae./ 27. bi nzaenxwáwi enc./ 28. éc go gé'e mc pádrinu'fhee enc./ 29. héc go géke./ 30. gc. ñéx̄xee n'a rc óra nu'm+ hínc yaa ma šc nhabgéhee yc bvshna./ 31. héc go géke'c.

#### Literal Translation

1. the rabbit-hunter went 2. two with his friend to help him drive the rabbit 3. and they found the snake. 4. he didn't let him kill it he says 5. the hunter or the marksman he stopped him. 6. then he left. 7. he went by. 8. it was found the rat. 9. and the same he didn't let him kill it. 10. and 11. then they left it. 12. and they continued continued they went in the mountains. 13. it was found the eagle. 14. the same he didn't let him kill it. 15. he went he went now. 16. he left it the eagle. 17. now it was found the rabbit. 18. he was going to hit it with the shot but he didn't allow it. 19. now he pardoned him. 20. he left him 21. but now it came up the anger this one the marksman 22. because he didn't let him hit it. 23. now he left him the marksman 24. and he the little man continued he went him who defended those animals. 25. and now he went he went he continued he crossed the mountains. 26. and he and he found now the snake now 27. they greeted he says. 28. ah, you are our godfather he says. 29. yes I am. 30. you defended us one hour then if not he was going to hit us the shots. 31. yes, I am.

#### Free Translation

A rabbit hunter went out with his friend to help him drive rabbits and they came

upon a snake. The friend didn't let the hunter kill the snake and they went on until they saw the rat. The same thing happened and the hunter couldn't kill the rat. So they left and continued on into the mountains where they found the eagle. The same thing happened again and they went on. Finally they found the rabbit. The hunter was about to shoot it but his friend stopped him. The rabbit was saved and they left. But by this time the marksman's anger was up because his friend wouldn't let him kill anything so he left his friend and went on alone. The nice man who defended the animals went on his way and continued across the mountains. Pretty soon he met the snake who greeted the man and said: "Oh, you are our godfather." "Yes, I am" answered the man. "That time you defended us we would have been shot," said the snake. "Yes, that's me," said the man.

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This is a note to follow Madison S. Beeler's An Extension of San Francisco Bay Costanoan? IJAL 38.49-54, partly in order to suggest that the interrogation mark should be removed, partly to add a few other points. Beeler finds in the recent publication of an eighteenth-century Franciscan missionary's