

Garó Spelling and Garó Phonology

Robbins Burling

University of Michigan

Introduction

Two important books on comparative Sino-Tibetan that were published in the seventies, Paul Benedict's Sino-Tibetan Conspectus (1972) and James A. Matisoff's Variational Semantics in Tibeto-Burman (1978), cite a number of Garó words in a sufficiently confusing transcription to remind me that the available data on this language (Bodo Group of Northeastern India) can be misleading to those who have not worked with it themselves. It may be useful, therefore, to offer a few notes about conventional Garó spelling (as used, for instance, in Garó dictionaries) and about the relevant aspects of Garó phonology, so that Tibeto-Burmanists can make the best use of available Garó materials. In order to keep things sorted out, I will use " " for spellings used by Benedict or Matisoff; underlining for conventional Garó spelling; [] for a transcription with more phonetic detail than is needed either for practical spelling or for abstract phonological purposes; and / / for examples in a more abstract phonological form--the more or less "phonemic" transcription that, I suggest, would be most useful for comparative purposes.

Consonants

Garó is rare among Tibeto-Burman languages in lacking contrastive tones. As in many tone languages, however, the syllable is a crucial phonological unit, and it is easiest to organize a description of Garó phonology around the various parts of a syllable: initial consonants, final consonants, and vowels. The possible initial consonants and consonant clusters, in a loose phonetic transcription, are shown in Table I. The raised h's indicate that voiceless stops are aspirated (even in clusters). The items in parentheses are relatively rare. Although n "clusters" occur in a few very common words (e.g. gni 'two'; kna- 'hear'; sni 'seven') there are good reasons for

Table I									
[p ^h	t ^h	k ^h		sp ^h	st ^h	sk ^h			
b	d	g		p ^h _r	t ^h _r	k ^h _r			
m	n			br	dr	gr			
s	č			sr	čr	ʃr			
	ʃ								
h	r	w	#	(gn)	(kn)	(sn)	(sl)	(1)]

denying them or sl the status of genuine clusters--a point to which I will return later. Initially the lateral [l] occurs only in a few recently borrowed words such as [lem] 'lamp' and [lek^ha] 'paper,' and unsophisticated Garos typically pronounce these words with their ordinary flapped [r] instead: [rem, rek^ha]. Thus [l] has a distinctly marginal status as an initial. By [#] I mean to indicate that syllables can occur without any initial consonant at all.

The system of initials contains two obvious and genuine gaps: [ɟ] does not occur initially, and there is no voiced counterpart of [s]. The [z] of borrowed words regularly turns into Garo [ʃ].

With only a few transparent exceptions, conventional Garo spelling follows the symbols given above very closely: 1) ch = [č]; 2) j = [ʃ]; 3) aspiration is not indicated. Since prevocalic voiceless stops are always aspirated, it would be largely redundant to indicate aspiration explicitly, and Garos do not do so. (But see below for problems with medial consonants).

Garos has a richer collection of final consonants than many Tibeto-Burman languages, but still, it is less extensive than their set of initials. Table II is artificially abstract in one respect (to be explained shortly) but it is the easiest place to begin. [p^ʰ, t^ʰ, and k^ʰ] are unvoiced, unaspirated and, except as required for the articulation of a later syllable, unreleased, and the symbol

[pʰ]	tʰ	kʰ		
m	n	ŋ	l	#
ᵐ	ᵑ	ᵑ	ᵐ	ʔ]

[ʔ] can be used as an explicit reminder that these are unaspirated and unreleased. These stops are, therefore, quite different phonetically than any of the prevocalic consonants. I used to believe that it was important to identify them with one or another set of initial stops, but I am no longer of that opinion. Garos always write these stops with a simple p, t and k, so it is easy to imagine that they are somehow the "same" as initial p, t and k, but I see no reason, except as it affects the interpretation of conventional Garo spelling, to identify finals with initials.

Post-vocally, Garo has a lateral [l], but no flap [r]. Since unsophisticated Garo speakers never have an initial lateral and never have a final flap, an old-fashioned phonemicist would point out that [r] and [l] are in complimentary distribution, and since they are phonetically quite similar, he would conclude that they should be regarded as members of the same phoneme. This is how I handled the matter in my grammar of Garo (1961) but I was then an old-fashioned phonemicist. I now believe that initial and final consonants in Garo, as in many other Tibeto-Burman languages, should be regarded as quite different creatures and not forced into the same framework. Garos write r initially and l finally, and there is some virtue in following their unambiguous practice (especially when we come to medials). This also makes it easy to transcribe the borrowings of sophisticated Garos who occasionally do use initial [l] in borrowed words.

[m, n, ŋ, and l] can occur together with a glottal stop. Phonetically it is difficult to assign the stop to

a clear position either before or after its partner, since the glottal stop seems to occur right in the middle of the nasal or lateral. Garos conventionally indicate the glottal stop with an apostrophe ' and when it co-occurs with [m, n, ŋ, l] they write the apostrophe second: m', n', ng', l'. This is an adequate spelling convention and it is the spelling used in all dictionaries that show the glottal stop at all, but, for reasons to be given shortly, I prefer to write the glottal stop before its associated consonant. Thus, for linguistic purposes, I would prefer to transcribe these finals as /ʔm, ʔn, ʔŋ, ʔl/.

Possibly because of the absence of contrasting tones and the corresponding reduction in contrast, Garo is relatively rich, among Tibeto-Burman languages, in polysyllabic words. Thus, in addition to word initial and word final consonants, we find numerous medial consonants and clusters. All medials, however, can be readily analyzed into a sequence of one final consonant or cluster followed by an initial consonant or cluster. I know of no restrictions upon such sequences and I know of no medials that cannot be interpreted in this way.

The phonetic differences between initial and final consonants do open the possibility of some medial contrasts that do not exist at the beginning or end of a word. Thus [k^hat^ha] 'word,' and [k^hat^ha] 'run' are in contrast. The obvious phonological interpretation of this situation is to distinguish these words by the position of the syllable boundary: /ka-ta/ 'word'; /kat-a/ 'run.' Garos spell these two words identically, however, and from the spelling alone it is impossible to know where the syllable boundary lies. Often, though not always, however, syllable boundaries correspond to morphological divisions, and this can help to locate the syllable boundaries. Thus the final /a/ of /kat-a/ 'run' is a verb suffix, while /ka-ta/ 'word' is a borrowed term and it cannot be analyzed into smaller parts.

Initial and final m and n are closer to each other phonetically than other initial and final consonant pairs, and this leads to some minor problems of interpretation. The description as I have given it would lead one to suppose that all of the following might be possible: /ča-a, ča-na, čan-a, čan-na/. In fact, there is every reason to believe that, at the morphophonemic level, all four really do exist. /ča-/ is a verb base meaning 'chase'; /čan-/ is a verb base meaning 'count'; /-a/ and /-na/ are verb suffixes indicating, roughly, 'present time' and 'infinitive' respectively. Thus the four forms given here mean, approximately, 'chases,' 'to chase,' 'counts,' 'to count.'

Whether or not these are all phonetically distinct is another matter. I asked Garos about this, and they told me that all four were different, but I now suspect that they were giving me a morphophonemic interpretation. Given the nature of the verbs and the verb suffixes, they ought to be distinct. Possibly, with careful articulation, they can even be kept distinct, though I cannot believe that the distinction is maintained in rapid speech. In any case, given the nature of the verbal morphology, there can be no doubt about the correct underlying form. Garos spell these four words as chaa, chana, chana, channa. Thus, the spelling makes no distinction between /ča-na/ and /čan-a/, and I am uncertain about the degree to which these are phonetically distinct either from each other or from /čan-na/. That they are etymologically, structurally, and semantically distinct, I have not a whisper of a doubt.

Vowels

Leaving aside a good many minor variations and subtleties, anyone first setting out to transcribe Garo would be likely to notice six vowel phones: [a, e, o, u, i, ə] and he might notice that [ə] is sometimes very short. [a, e, o, u] cause no problem. All are clearly distinct from one another, and Garos write them exactly as one would expect: a, e, o, u. [i] and [ə] raise a few more difficulties.

[i] is high, front, unrounded; [ə] is further back and a bit lower, although it is higher, further back and more tense than English /ə/. In monosyllables and in the final syllable of longer words, [i] occurs only when the syllable is closed with [ʔ] or open, while [ə] occurs only in syllables closed by consonants other than [ʔ]. There is, therefore, perfect complementary distribution, and one must be tempted to interpret both [i] and [ə] as /i/.

In non-final syllables, however, [i] and [ə] can appear to be in contrast. Such phonetic sequences as [bit^ha] and [bət^ha] are both possible. [ə], in fact, is by no means uncommon in front of consonants that must, because of their phonetic character, be interpreted as the initial of the following syllable: [mæk^haŋ] 'face'; [gəp^hok] 'white'; [rəča] 'hundred' etc. It is important to notice, however, that sequences of [ə] with certain other initial consonants never occur. The following, for instance, are quite impossible: *[ər], *[əs].

It turns out that [ə] can precede an apparently initial consonant only when the language also has a homorganic final consonant. The obvious solution, therefore, is to consider the earlier syllable to be closed by such a consonant. This allows us to extend to all syllables the generalization that [ə] occurs only in syllables that are closed by a consonant other than [ʔ]. The words cited above can then be interpreted as: /mik-kəŋ, gip-bok, rit-čə/.

There is a bit of phonological slight of hand in such an interpretation, but only a bit. A novice transcriber might not "hear" a sequence of two consonants in these cases, but the pattern of allowing [ə] only in closed syllables and the pattern of allowing [p^h, t^h, k^h, and č] only in syllable initial position are both so widespread and consistent, that, as I came to know Garo, I did begin to "hear" both consonants. The interpretation allows the flat generalization that [i] occurs only in open syllables or before [ʔ], while [ə] occurs only in syllables closed by

consonants other than [ʔ]. We can use /i/ for all these vowels and this is, indeed, conventional Garo orthographic practice.

With this complexity disposed of, Garo can be reasonably said to have a five vowel system, and this is reflected in the conventional system of spelling.

There remains one additional complication with [ə]. I pointed out earlier that [ə] can be very short. It turns out that /i/ in closed syllables (i.e. [ə]) is considerably shortened in certain positions--especially when following a syllable initial /s/ or when preceding a syllable final /k/. In fact, there are some syllables that one might be tempted to transcribe as [skʰ] for they seem to have little or no vowel between the [s] and the [kʰ]. It seems best to interpret these as /sik/, however, along with the generalization that when the /i/ gets shortened from both before and behind, it practically disappears. Since there are no other syllables with a fuller vowel that one would be tempted to interpret as /sik/, this raises no distributional problem. Indeed, to interpret these syllables as anything except /sik/ would leave a peculiar gap, for the language would then have no /sik/ syllables at all.

Since this vowel is phonetically slight, however, Garos do not always indicate it in their writing, and this leads to certain minor spelling ambiguities. It will be recalled that there are /sk/ clusters that are written sk and pronounced [skʰ]. The clustered /k/ is aspirated and clearly pre-vocalic. The final /k/ of the /sik/ syllable, on the other hand, is unaspirated as is appropriate for a syllable final. (Notice the peculiar difference from the English pattern where /k/ is unaspirated in /s/ clusters. In Garo, it is precisely in /s/ clusters where it is aspirated). All this allows the following contrast in Garo which is not indicated in the spelling:

wish	<u>ska</u>	[skʰa]	/sik-a/
instead of	<u>ska</u>	[skʰ ^h a]	/ska/

Garos also write a few syllables as if they had an initial sl cluster: e.g. slem 'pipe stem.' Even unsophisticated Garos pronounce the l in this word with a lateral, and this may appear to violate the general rule that laterals occur only postvocally. Once again, the obvious solution is to consider the l as closing the syllable /sil/ and to interpret this word as /sil-em/ and, once again, this poses no distribution problems, since there are no other contrasting syllables with a more explicit vowel for which one would want to use the sequence /sil/. We can simply say that in /sil/, as in /sik/, the /i/ is shortened almost to the point of disappearance. In fact, even a transcriber with no experience with Garo might hear slem as having two syllables, although if he had not yet realized that [l] usually occurs only as syllable final, he might be tempted to interpret the word as having a syllabic [s] or he might even note a very short [ə] between the [s] and the [l].

The interpretation of [sk] and [sl] as complete syllables that simply have very short vowels, invites a similar interpretation for the relatively rare "clusters" that Garos write with kn, gn, and sn. Once again, no distributional problem is caused by interpreting these as syllables with a very short /i/ and, once again, any other interpretation would leave us with peculiar gaps in syllable inventories--i.e. there would be no syllables /kin, gin, sin/ at all. It is for this reason that I cautioned against accepting these as true "clusters" in my inventory of initials. Garos write these as if they are clusters, and this is a perfectly adequate practical spelling, but interpreting them as full syllables seems to provide a more consistent overall pattern for the language.

The syllables with very short /i/ might, at first, seem reminiscent of the weak initial syllables of such languages as Burmese or Jinghpaw. In both cases, the syllables are weakly stressed (Garo stress is regularly on the final syllable of the word), quite short, and if they have any

vowel at all, it has a more or less shwa-like quality. In fact, however, there is really no need and no good reason to recognize any special class of weak syllables in Garo. Since Garo lacks tonal contrasts, special tonal properties cannot set off a class of weak syllables as is the case in the other languages. Moreover, Garo syllables with short /i/ are all closed, (or at least can be interpreted as closed) whereas, typically, the weak syllables of languages such as Burmese or Jinghpaw are open. Finally, syllables with short /i/ (the only possible candidates for weak syllables) are not particularly common in Garo, certainly far less common than the weak syllables of the other languages.

I have described the syllable as if it could be closed with a glottal stop or a glottal cluster, but this generalization requires a hedge. In phonetic fact, Garo rigidly excludes a glottal stop or glottal cluster from word final position, and on first hearing the language one would have no clear way of knowing whether medial glottal stops should go with the earlier or the later syllable. However, the language has a large number of pairs in which clearly related forms assume a somewhat different shape as a combining form than when occurring as the final syllable of a word. Some typical examples are given in Table III.

	Combining form	Free form
bird	[doʔ-]	[doʔo]
mell ^o ion	[t ^h eʔ-]	[t ^h eʔe]
bamboo	[waʔ-]	[waʔa]
fire	[waɪ ¹ -]	[waʔaɪ]
meat	[beɪ ¹ -]	[beʔen]
bug	[joŋ ¹]	[joʔoŋ]

The combining form and the word final form are obviously closely related, and one can be easily derived from the other. The only possible question is: Which is the basic form? One might first presume the word final form

to be basic, but this would mean that word final syllables would have different characteristics from other syllables, and it would also offer no explanation for the surprising number of Garo words in which a glottal stop is surrounded by identical words. It is, therefore, simpler to regard the combining form as basic. The word final form can then be easily derived by the following rule: Whenever a syllable whose combining form has [ʔ] after its vowel occurs at the end of the word, the vowel that precedes the glottal must be echoed after the glottal. It was to allow an easy formulation of this rule that led me to prefer to interpret [ṁ, ṇ, ṣ, ṭ] as /ʔm, ʔn, ʔɳ, ʔl/ etc. rather than as /mʔ, nʔ, ɳʔ, lʔ/ which would conform better with the conventional spelling: m', n', ng', l'. Garos actually write the free forms of the words listed in Table III as do'o, te'e, wa'a, wa'al, be'en, and jo'ong, and when combined with the possessive suffix -ni they become do'ni, te'ni, wa'ni, wal'ni, ben'ni, and jong'ni.

For comparative linguistic purposes, the most suitable forms would seem to be /waʔ-, waʔ-ni, beʔn-, beʔ-en/ etc. By regarding the combining form as basic, the underlying syllable type can be taken to be the same whatever its position in the word. The peculiar properties of word final syllables can then be easily derived by the echo vowel rule. The Garo syllable, therefore, can be reasonably described as allowing a final glottal stop or glottal cluster, even though the Garo word does not have this option. The rule of echo vowels is, in fact, a fully productive one for Garos. Verb bases are rarely used without some suffix. Unlike noun bases, they are always protected by a suffix, so verb bases that end in a glottal stop rarely have the opportunity to have their vowels echoed. If in some manner a Garo can be persuaded to pronounce such a verb base in isolation, however, he will automatically echo its vowel.

One final problem with the vowels deserves to be noted briefly. A syllable consists, minimally, of a single vowel, and there appear to be no restrictions on vowel sequences. Morphological permutations regularly bring vowels of various sorts, including sequences of two identical vowels, into direct contact. Even though these may flow smoothly into one another, they retain their separate identity. When adjacent vowels originate in separate morphological units, it is only natural to continue to consider them as separate syllables even when following each other closely. In /re-ba-a/ 'come' the final /-a/ is the present tense suffix, and it is by no means swallowed up in what precedes. This much suggests that we should simply accept all vowel sequences as representing as many syllables as there are vowels. The problem with this is that some sequences, especially /a-i/ and /a-u/ are quite common and occur with some regularity within the same morpheme. They hardly sound bi-syllabic. On the other hand, there seem to be no clear dividing lines between sequences of identical vowels, such as /a-a/, that phonetically are merely long; the relatively diphthongal sequences such as the first one (or two) syllables of a word like /ma-i-si-a/ 'understanding'; and the more clearly bi-syllabic sequences of different vowels such as /i-a/ 'this.' The only way to achieve consistency is to assign each vowel to a phonologically separate syllable, but, admittedly, this gives a misleading phonetic impression in some cases.

Spelling and Internal Reconstruction

I can now summarize the points where conventional Garo orthography can be misleading, and make a few observations about the possibility of internal reconstruction on the basis of modern forms. Garo texts and dictionaries give a reasonable representation of Garo phonology. Since Garo lacks tones, there is no problem about missing tone marks, as is so often the case with non-professional transcriptions of Tibeto-Burman languages. Nevertheless, there are a few points where the user of available materials

should be wary.

Initial l. Words spelled with initial l are all recent borrowings. Many Garos pronounce these words with the usual initial flapped ɾ.

Initial clusters gn, kn, sn, sl, sk. As discussed earlier, there is good reason to feel that the first four of these should better be regarded as /gin, kin, sin, sil/. The case of sl is particularly clear, since a lateral l can ordinarily occur only post-vocally. sk is ambiguous, for it can stand either for a cluster or for the syllable /sik/.

m', n', ng', l'. These are unambiguous spellings and they must always be understood as syllable finals. As argued above, I feel it is more sound morphophonemically to consider these to be /ʔm, ʔn, ʔɲ, ʔl/, although the spelling used by the Garos has the practical advantage that the ' clearly marks the syllable boundary. If syllable boundaries are not otherwise indicated, ʔm etc. could indicate either /ʔm-/ or /ʔ-m/ etc. There is some reason to suspect that at least a few of the Garo post-vocalic glottal stops have migrated from an earlier position in the syllable (e.g. compare Jinghpaw /ʔwan/ and Garo /waʔl-/ 'fire'). By writing /ʔl/ etc. we may bring the syllable into a form that is closer to the ancestral one.

V'V. Sequences of identical vowels separated by a glottal stop can almost always be interpreted as deriving from a combining form that has a final glottal stop or glottalised cluster. (There are a few exceptions: /soʔ-ot-a/ 'kill' is invariant. The glottal stop and the syllable final /t/ cannot coalesce into the same syllable.) The combining form (i.e. the form without the echo vowel) is surely the etymologically significant form, e.g. Garo /doʔ-/ , Boro /dauʔ/ 'bird.'

ph, th, kh. A number of early Garo word lists were published in which h was written after initial voiceless stops. This was probably the result of the experience

that the recorders had had with Indic languages where the contrast between aspirated and non-aspirated stops is often crucial. People with such a background could easily imagine that the vigorous aspiration characteristic of Garo voiceless stops requires explicit marking. Modern Garo is never written with an h following these stops, but the h's have sometimes found their way into modern linguistic works. If used consistently, this spelling would have the considerable virtue of distinguishing the pre-vocalic voiceless stops (which are always aspirated) from the post-vocalic voiceless stops (which are never aspirated), but consistency has not been achieved, and spurious doublets have even cropped up that mistakenly suggest alternative pronunciations of the same word or syllable. Benedict offers "ku" and "khu" as alternative forms for the word 'mouth,' seeming to imply (incorrectly) that Garo has alternative pronunciations of the word (pg. 184). He also offers "pha" and "əpa" as alternate forms for 'father' (pg. 19) although the "pha" and "-pa" syllables are, in fact, identical. (The initial vowel really does distinguish the two forms of the word, but they should be /pa/ and /a-pa/.)

When ph, th, or kh is encountered in an old word list, it can be safely interpreted as pre-vocalic /p, t, or k/, and it would surely be best, in this case, for linguists to stick to Garo convention and to omit all h's from our transcription, while relying upon hyphenization to indicate syllable division and the resulting position of the consonant within the syllables.

Medial consonants and consonant clusters. The most serious problems with Garo spelling arise from the complications of medial consonants. In many cases the interpretation is unambiguous but a fair number of words have quite misleading spellings of these consonants.

Since initial consonants often differ from final consonants, and since the letters used to represent them

in conventional spelling also differ, it is often possible to locate the syllable boundary quite easily. The ˙ used for the glottal stop can always be confidently interpreted as marking the end of a syllable, as can virtually all examples of medial l. On the other hand, ch, b, d, and g must always be interpreted as syllable initials, and r must be either an initial or a member of an initial cluster. Sequences such as pch, ˙t, ngd, etc. can, in an entirely straightforward fashion, be interpreted as /p-č, ʔ-t, ŋ-d/ etc.

In conventional Garo, including all modern dictionaries, however, p, t, k, m, and n are used for both pre- and post-vocalic consonants and, as a result, when these letters occur between two vowels, it is impossible to know which syllable they properly belong with, unless syllable division is explicitly marked. Short of finding an informant, the only hope of deciding where the boundary belongs is to search for etymologically related words in which the same syllables occur in different surroundings. Individual Garo syllables are very stable, rarely changing from compound to compound or from inflectional form to inflectional form, so two or more related compounds can sometimes give a reliable indication of syllable (and morpheme) boundaries.

Some medial clusters are inadequately represented in conventional Garo spelling. This is most often the case when the vowel of the first syllable is a [ə] which requires a closing consonant to protect it from becoming [i]. These protecting consonants are often omitted in spelling. A number of examples are shown in Table V.

There can be little doubt that the modern Garo vowel /i/ has resulted from the falling together of two contrasting vowels. These are still represented in Boro by contrasting vowels that are phonetically similar to the [i] and [ə] allophones of Garo /i/ (Burling, 1959). It seems clear that the earlier *i turned into modern Garo [ə] in

closed syllables, while the earlier *ə became [i] in most open syllables, and the result was complementary distribution. In certain polysyllables, however, [ə] could be protected from change by the interpolation of a final consonant homorganic with the one that follows in the next syllable. (This is simply a diachronic interpretation of the phonological process described earlier.) The clearest examples of this are found in a set of words that now have one or another form of a frozen prefix that must once have had the form *gə-. This has assumed various forms in modern Garo that depend quite simply upon what follows:

red	<u>gichak</u>	[gəčak]	/git-čak/
white	<u>gibok</u>	[gəbok]	/gip-bok/
black	<u>gisim</u>	[gisəm]	/gi-sim/

Before such consonants as [č] and [b] a homorganic consonant could be added that protects the [ə], but in the word for 'black' the vowel has changed to [i]. This is because Garo has no syllable final consonant that is homorganic to /s/ that could have been interpolated into the word to protect the older pronunciation.

ng. Always finally, and most often medially, ng should be interpreted as /ŋ/, though in rare cases a syllable final /n/ may be followed in the next syllable by an initial /g/. Thus, chongen 'will be small' is actually /chon-gen/ but there is no way to know this from the spelling of this word alone. Knowledge that chona means 'is small' and that -gen is the future suffix will, of course, make the correct interpretation clear.

'. The apostrophe, known to the Garos as the raka or 'hard' letter, is the entirely adequate conventional symbol for the glottal stop. Since it is not an official part of the English alphabet, however, Garos seem to think of it as less than a full letter and often do not bother to write it. The best dictionaries include the

raka in their spellings, but the user should expect more errors in its transcription than in any other aspect of the language. If two syllables are found which seem to have the same meaning, and which are identical except that one has a raka that the other lacks, the most likely explanation is that the writer simply forgot, or did not bother, to include the raka in one case. Except for its involvement with the echo vowels, the raka does not come and go in the spoken language, and it is not embroiled in morphological and morphophonemic complexities. Some spoken syllables have a consistent glottal stop while others consistently lack one, and writers are far more likely to omit a raka that should be included than to insert one mistakenly where no glottal is actually spoken. Thus, in case of conflicting evidence, the best guess is that the syllable does have a raka.

Summary

As a way of summarizing the various points made earlier and of offering explicit examples, I list, in Table V, a number of misleading spellings that have found their way into Benedict's or Matisoff's books, together with the more conventional Garo spelling, a transcription with a bit of explanatory phonetic detail, and, finally, a transcription that I offer as suitable for comparative linguistic purposes.

It must be emphasized that I have selected difficult cases for this table and, taken by itself, it gives an entirely misleading impression of the extent of the confusions. Actually, the great majority of words are spelled in straightforward and easily interpretable ways in all the sources. In particular, my transcription and conventional spelling are much more often alike than different. They differ in only four significant ways: Most important, I reinterpret some medial consonant sequences. More transparently, I indicate syllable boundaries; reverse the order of the glottal stop and associated /m, n, ŋ, l/; and I break up a few "clusters" with /i/; in addition, I

substitute /č, ŋ, and ʔ/ for ch, ng, and ', but these are trivial concessions to the habits of linguists. I follow Garo practice with the five vowels and use consonants as shown in Table IV, in which the spelling, where different, is shown in parentheses.

Table IV

Initials

/p	t	k	sp	st	sk
b	d	g	pr	tr	kr
m	n		br	dr	gr
s	č(<u>ch</u>)		sr	čr(<u>chr</u>)	jr
	j				
h	r	w	#		(1)/

Finals

/p	t	k		
m	n	ŋ(<u>ng</u>)	l	#
ʔm(<u>m'</u>)	ʔn(<u>n'</u>)	ʔŋ(<u>ng'</u>)	ʔl(<u>l'</u>)	ʔ(<u>'</u>)/

I should also emphasize that my revised spellings in *n* way undermine the more general arguments of either Benedict or Matisoff. On the contrary, I believe that they serve to clean up a number of ambiguities and contradictions and allow their arguments to be stated more forcefully. In Table V, figures such as "B53" etc. give page references to Benedict's Sino-Tibetan Conspectus, and "M23" etc. give references to Matisoff's Variational Semantics in Tibeto-Burman. (c.f.) indicates "combining form"; (f.f.) "free form."*

*Benedict gives many more Garo examples than Matisoff and, as an inevitable consequence, the inadequacies of the older sources upon which he relies, show up more clearly. Benedict, for instance, only rarely includes glottal stops. Even though he correctly gives "waʔl" for 'fire' (pg. 23,

bear	"mapil" mapbil(B107)	<u>mapil</u>	[mapʔɔl]	/map-il/
bamboo	"wa"(B23)	<u>wa'-(c.f.)</u> <u>wa'a(f.f.)</u>	[waʔ- waʔa]	/waʔ- waʔ-a/
egg	"bitsi(B45)	<u>bitchi</u>	[bətʃi]	/bit-či/
five	"boŋa"(B31)	<u>bonga</u>	[boŋa]	/boŋ-a/
foot, leg	"dža"(B34)	<u>ja'-(c.f.)</u> <u>ja'a(f.f.)</u>	[jaʔ- jaʔa]	/jaʔ- jaʔ-a/
fruit	"bithe"(B65)	<u>bite</u>	[bitʰe]	/bi-te/
hair(head)	"khəni(B65)	<u>kni</u>	[kʰəni]	/kin-i/
hand	"džak dža"(B34)	<u>jak</u>	[jakʔ]	/jak/
insect	"džo "(B34)	<u>joŋ'-(c.f.)</u> <u>jo'ong(f.f.)</u>	[joŋ- joʔoŋ]	/joʔŋ- joʔoŋ/
kill	"soʔ soʔot"(B27)	<u>soʔot</u>	[soʔot]	/soʔ-ot/
nine	"sku"(B61)	<u>sku</u>	[skʔu]	/sik-u/
rain(noun)	"mikka"(B109)	<u>mikka</u>	[məkʰa]	/mik-ka/
red	"gitśak gittśak"(B46)	<u>gitčak</u>	[gəčakʔ]	/git-čak/
seven	"sni"(B16)	<u>sni</u>	[sʔni]	/sin-i/
snake	"tsipu"(B19)	<u>chipu</u>	[čəpʔu]	/čip-u/
three	"giŋam"(B94)	<u>gitam</u>	[gətʰam]	/git-tam/
twenty	"khol khal"(B83)	<u>kol</u>	[kʰol]	/kol/
two	"gni"(B94)	<u>gni</u>	[gʔni]	/gin-i/
back	"džaŋ-gal"(M22)	<u>jaŋgɔl</u>	[jaŋgɔl]	/jaŋ-gil/
bile	"kha-khit"(M20)	<u>ka'kit</u>	[kʰaʔkʰət]	/kaʔ-kit/
brains	"təniŋ"(M212)	<u>taning</u>	[tanəŋ]	/ta-niŋ/
liver	"bi-ka"(M207)	<u>bika</u>	[bikʰa]	/bi-ka/
lungs	"kasop"(113)	<u>ka'sop</u>	[kʰaʔsopʔ]	/kaʔ-sop/

Postscript: Garo Dictionaries

The ideal Garo dictionary has yet to be produced, but several less than ideal ones are available and they can be used with profit.

Mason, Marcus C., English-Garo Dictionary. First published in 1905 by members of the Garo Mission of the American Baptist Missionary Union, Tura, Assam. Re-printed as recently as 1954 under the imprint of the "Miranda Library" Lower Chandmari, Tura. With 190 pages and about 5,000 entries, this was, for many years, the only Garo dictionary, and it probably had a considerable influence in fixing Garo spelling. It was intended primarily for Garo students, and its usefulness to the linguist is limited by the fact that many of its entries consist of definitions of the English words rather than equivalents. It needs to be used along with a Garo-English dictionary so as to check the meaning of the Garo words that are found.

K. W. Momin, English-Achiku Dictionary. My copy has no date or place of publication, but it first appeared about 1956 and it is the successor to Mason's dictionary. Mason's dictionary must have been one of the sources

50, this is actually the combining form) he omits the glottal from "wal-ku" 'smoke' (pg. 61) and from "wal-sre" 'flame' (pg. 64). Benedict usually follows Garo spelling by using "i" for both [i] and [ə], but occasionally "ə" sneaks in instead. In addition, he regularly uses "tś" and "dź" where all dictionaries and all other writing in modern Garo use ch and j. "tś" and "dź" are perfectly clear, but they add nothing in the way of phonetic accuracy, typability, or even linguistic conventionality, and they can only cause confusion if comparisons are to be made with other sources. Finally, there are a few miscellaneous oddities which probably simply reflect mistakes in the original sources, although one can never rule out the possibility of dialectal variants. For instance, 'fish' is spelled "na-tōk" (pg. 47, 54) whereas na'tok is conventional, and I would recommend /naʔ-tok/ for linguistic purposes. I do not know where the accent on "tōk" comes from or what it is supposed to mean.

upon which Momin based his dictionary, but the latter is somewhat fuller and has some added entries. It is similar to Mason's dictionary and suffers from the same limitations. In addition, unfortunately, Momin's dictionary fails to include the raka (glottal stop).

D. S. Nengminza, The School Dictionary: Garo into English, Tura, Miranda Library, 1946 and later printings and editions. This is the most readily available Garo to English dictionary. Early editions suffered from a good many misprints, but if used with caution it can be a source of considerable information. Nengminza does include the raka. 160 pages, about 6,000 entries.

Lucy M. Holbrook, A Garo Word Collection. Unpublished typescript. No date, circa 1945. This lexicon, consisting of 200 legal sized pages and about 13,000 entries, is by far the best Garo dictionary ever put together, but I know of no plans for publication. The number of entries is artificially swollen by derivational and even inflexional forms, but it is still the fullest and most careful Garo dictionary and it has the great advantage over all others of indicating not only the raka but syllable boundaries as well. This makes it easier to sort out both the phonological shape of the words and their morphological constituents. I have a carbon copy of a typescript of this dictionary and would be glad to send a copy to anyone willing to pay the cost of Xeroxing and postage. (Robbins Burling, Department of Anthropology, University of Michigan, Ann Arbor, MI 48109).

References Cited

Benedict, Paul K.

1972. Sino-Tibetan Conspectus. Princeton-Cambridge Studies in Chinese Linguistics II. University Press: Cambridge.

Burling, Robbins

1959. "Proto-Bodo" Language 35.3 433-453.
1961. A Garo Grammar. Deccan College Monograph Series, No. 25. Poona.

Matisoff, James A.

1978. Variational Semantics in Tibeto-Burman. Occasional Papers of the Wolfenden Society on Tibeto-Burman Linguistics/Volume VI. Institute for the Study of Human Issues: Philadelphia.