

PHONETICS

SOUNDS AND PHONEMES

Brahui has nine pure vowel sounds: *a*, *ā*, *i*, *ī*, *u*, *ū*, *e*, *ē* and *ō*. The articulation of these sounds is determined by the parameters given in Table 1

Acoustically, these sounds are close to the corresponding Hindustani or Tamil sounds.

The short vowel *u* following a noise consonant and preceding a long *ā* generally takes the form of a non-syllabic *w*, being a free variant of *u* in that position, e.g. *suār* (or *swār*) 'horseman', *juān* (or *juwān*) 'good'.

Table 1

Articulating part of tongue \ Height of tongue in mouth	Front	Central	Back
	Close	<i>ī</i> <i>i</i>	
Medium	<i>ē</i> <i>e</i>		<i>ō</i>
Open		<i>a</i> <i>ā</i>	

Short and long vowels are the easiest to distinguish in stressed syllables (the stress generally falls on a long syllable). In words containing several long vowels the unstressed long vowels are often reduced quantitatively till they become short.

Nasalised vowels occur rarely, mainly in borrowed words, e.g. *daⁿz* 'dust', *yāⁿzda* 'eleven', *shiⁿRshiⁿRing* 'to neigh', *sēⁿzda* 'thirteen', *sirōⁿz* 'lute'. Most words containing nasalised vowels have parallel variants with non-nasalised vowels instead of the nasalised ones.

Brahui stress is quantitative-dynamic and weak. The position of the stress is traditional (not fixed). As a rule, the stress tends to fall on the beginning of the word. In words containing a long vowel, the stress falls on the long syllable; in words containing geminated consonants or consonant clusters, the stress generally falls on the vowel preceding these consonants or consonant clusters.

The consonants, of which there are twenty-nine (*p, b, t, d, T, D, k, g, ʔ, f, s, z, lh, R, c, j, sh, zh, x, gh, y, r, l, v, m, n, N, ŋ, n^g*), fall into noise consonants and sonants, and are classified as shown in Table 2 according to the place and manner of their formation.

The articulation and the acoustic quality of these sounds (except *lh* and *ʔ*) are similar to those of Hindustani and Tamil consonants.

The liquid *v* in the final syllable of a word after a short *a* is generally pronounced as a bilabial, in all other positions it is pronounced as a labiodental.

The voiced fricative velar *gh* is pronounced in the same way as the voiceless velar *x* and differs from the latter only in that in its pronunciation the vocal cords vibrate, e.g. *gharib* 'poor' (cf. *xarāb* 'bad').

The voiceless laryngeal plosive *ʔ* (glottal stop) is more typical of Arabic and other Semitic languages; in Dravidian languages, besides Brahui, it occurs only in Kurukh, Kuvi and Kui. A glottal stop at the beginning of a word can be heard in many words which start with a so-called rough glide (*Knacklaut*) in German, e.g. *ʔalling* 'to take' (cf. *alle* 'all' in German).

The voiceless lateral consonant *lh* differs from the sonant *l* in that in its pronunciation the vocal cords do not vibrate and there is a considerable noise, e.g. *ʔalh* 'take (it)'. A final English *l* following

Table 2

Manner of formation		Place of formation		Labial	Dental and alveolar	Retroflex	Palatal	Velar	Laryngeal	
Noise sounds	plosive	voiceless		p	t			k	ʔ	
		voiced		b	d			g		
	affricative	voiceless						c		
		voiced						j		
	fricative	voiceless		f	s		sh		x	
		voiced			z		zh		gh	
	lateral and flapped	voiceless				lh				
		voiced					R			
	Sonants	nasal			m	n		ñ	ŋ	
		lateral				l				
trilled					r					
liquid				v			y			

a voiceless consonant (e.g. in the word *bottle*) gives an approximate idea of this Brahui sound.

The articulation and the acoustic effect of the velar nasal sonant n^g coincide with those of the English *ng*, e.g. *pink* 'names' (cf. Eng. *pink*). In the combination *ng*, the consonant *g* is always pronounced distinctly, e.g. *bing* '(he) heard'.

The retroflex consonants *T*, *D*, *R* and *N* are articulated by the tip of the tongue pressed against the hard palate behind the alveoli. Their articulation may vary perceptibly from purely retroflex, in which the underneath of the tip of the tongue is either pressed against the hard palate or (in the case of *R*) taps on the hard palate behind the alveoli, to cacuminal, in which the blunt edge of the tongue touches the hard palate, e.g. *ciT* 'rope', *Dak* 'cut', *ṛR* 'sister', *vanD* 'share'.

Besides the preceding sounds, borrowed words occasionally contain a pharyngeal fricative *h* /22, 982-983/, e.g. *bahā* 'price', *āhaR* 'summer'. Also, the aspirated consonants *kh*, *gh*, *ch*, *jh*, *Th*, *Dh*, *th* and *dh* are frequently encountered as free variants of the corresponding pure plosives and affricates; originally they were probably borrowed from Indo-Aryan languages, but are now often found in both indigenous words and words borrowed from Iranian, e.g. *khask* (parallel with *kask*) '(he) died', *bhāz* (parallel with *bāz*) 'much', 'many', *bhalun* (parallel with *balun*) 'big'.

All the preceding sounds, with the exception of the sonants n^g , \tilde{n} , *N* and the vowel *e*, constitute independent phonemes and are encountered in words irrespective of their position and the neighbouring sounds. The sonants n^g , \tilde{n} and *N* occur only before a plosive or an affricate of the corresponding place of articulation, i.e. the sonant n^g is encountered only before the plosive *k* or *g*, the sonant \tilde{n} before the affricate *c* or *j* and the sonant *N* before *T* or *D*. These three sonants are variants of the phoneme *n* in the preceding positions.

The use of the short vowel *e* is restricted positionally in a peculiar way: it does not occur in initial syllables or when stressed (in such cases only \tilde{e} is encountered), e.g. *il' lā*/'ille 'leave (it) alone', *bi'sē* '(he) baked'/'bise '(he) may bake'. This circumstance leads us to regard the short vowel *e* as a positional variant of the long vowel \tilde{e} /26, 7-9/.

PHONETIC PROCESSES

Assimilation. The most widespread cases of assimilation in Brahui are those of partial regressive place assimilation of the nasal sonants *n* and *m* to the plosives which follow them, e.g. *bin* 'listen (sing.)'—*bimbō* 'listen (pl.)', *bimpa* 'don't listen (sing.)', *bing* '(he) heard'; *am* 'very'—*andā* 'that very'. Besides, there frequently occur optional assimilations of the *ng* + *b/p* → *mb/mp* type, e.g. *rasēng* 'come (sing.)'—*rasēngbō* or *rasēmbō* 'come (pl.)', *rasēngpa* or *rasēmpa* 'don't come (sing.)'. Assimilation of *ʔ* to *s* before a plosive consonant has been observed only in the stem of one verb, *kaʔing* 'to die': *kaʔ* 'die'—*kaspa* 'don't die (sing.)', *kask* '(he) died'.

Partial progressive assimilation is regularly observed when the

formant *-k-* of the Simple Past tense is added to verb stems ending in *-n*, e.g. *kuning* 'to eat' (the stem *kun-*)—*kung* '(he) ate up'.

Connecting (euphonic) sounds and syllables are not morphemes; they serve to join various suffixes to bases and stems or to other suffixes. The part of such connecting elements in Brahui is played by *-a-*, *-i-*, *-u-*, *-e-*, *-ē-*, *-as-*, *-us-*, *-gh-*, *-R-*, *-n-*, *-T-* and *-in-*.

The connecting vowel *-a-* is used in the singular of substantival forms to join the formants of the genitive, dative and comitative cases to monosyllabic words, and the formant of the locative case to bases ending in a consonant (and, optionally, to monosyllabic bases in *a*); it is also used in verbs to join the formant of the Pluperfect, *-s-*, to those of the Simple Past, *-k-*, *-(i)s-* (optionally, parallel with the connecting vowel *-u-*), e.g. *mār* 'son'—gen. sing. *māranā*; *bā* 'mouth'—dat. sing. *bāaki*; *lōt* 'bag'—com. sing. *lōtatō*; *xarās* 'bull'—loc. sing. *xarāsaT*; *xalling* 'to strike', 'to hit'—*xalkas-* or *xalkus-* (in the Pluperfect).

The connecting vowel *-e-* is used in the plural of substantival forms to join the formants of the instrumental, comitative, ablative and lative cases to a base, e.g. *lōt* 'bag'—instr. pl. *lōtāteaT*, com. pl. *lōtātetō*, abl. pl. *lōtāteān*, lat. pl. *lōtāteāy*.

The connecting vowel *-ē-* is used in the plural of substantival forms to join the formants of the dative, locative, adessive and terminative cases to a base, e.g. *urā* 'house'—dat. pl. *urātēki*, loc. pl. *urātētT*, ades. pl. *urātēk*, term. pl. *urātēkā*.

The connecting consonant *-gh-* is used optionally in the singular of substantives to join the formants of the ablative and lative cases to bases ending in *-a/-ā* (except monosyllabic ones), in the plural of substantives to join the formant of the plural *-āk* to bases ending in *-a*, and in adjectives to join the suffix of the definite form *-ā* to bases ending in *-a/-ā*, e.g. *urā* 'house'—abl. sing. *urāghān* (also *urāān*); *bāva* 'father'—lat. sing. *bāvaghāy* (also *bāvaāy*); *parra* 'wing'—nom. pl. *parraghāk* (also *parraāk*); *zēbā* 'beautiful'—definite form *zēbāghā* (also *zēbāā*).

The connecting consonant *-R-* is used optionally in the singular of the substantives and pronouns obtained by the substantivisation of the genitive case form, to join the formants of the dative, instrumental, comitative, ablative, lative, adessive and terminative cases, e.g. *lumnā* 'brother's property'—dat. sing. *lumnāRki* (also *lumnāki*).

The connecting vowel *-u-* is used in verb forms to join the formants of person to the suffixes *-k-* and *-(i)s-* in the Simple Past and the Past Continuous, as well as to join the formant of the Past Perfect *-n-* and the formant of the Pluperfect *-s-* to the formants of the Simple Past *-k-* and *-(i)s-*, e.g. *xalling* 'to strike'—*xalkuT* 'I struck', *(a)xalkuTa* 'I was striking', Past Perf. stem *xalkun-*, Plu. stem *xalkus-*.

The connecting vowel *-i-* is used in verb forms to join the formant of the plural of the imperative mood *-bō* and the formants of the negative form to the stem, e.g. *saling* 'to stand'—imp. pl. *salibō* (also *salbō*), neg. stem *salip(a)-*, *salit(a)-* /also *salp(a)-*, *sal(a)-*.

The connecting syllables *-us-* and *-as-* are used optionally in Pluperfect and conditional mood forms to join the formants of person, e.g. *xalkususuT* 'I had struck' (also *xalkusuT*), *binōsasas* 'if (he) had heard', '(he) would have heard' (also *binōsas*).

The connecting consonant *-n* is used after substantival forms in the dative, comitative or terminative case and after definite-form adjectives ending in *-ō*, when they precede a positive Present tense form of the link-verb *anning* 'to be', both the words being pronounced as a single intonation unit, e.g. *kul nā māra^{kin} (māratōn) e* 'all /this/ /is/ for (with) your son'; *num cunakkōn ure* 'you /are/ /still/ young'. The connecting elements *-T* and *-in* are used in analogous cases with substantives in the lative (*-T*) and the adessive (*-in*), e.g. *ōnā mōn nus-xalāyT e* 'its face is turned towards the mill'; *kul nā māriskin e* 'everything is in your son's possession'. The connecting consonant *-n* is used optionally before words beginning with a vowel or a dental plosive, e.g. *kanā māratōn tūlh* 'sit down /beside/ my son'.

Gemination of Consonants. In short monosyllabic words (bases/stems) ending in the consonant *k, c, p* or *f*, and also in most short monosyllabic words (bases/stems) ending in *T* or *D*, the final consonants are geminated when a suffix beginning with a vowel is added to them, e.g. *'uc* 'camel'—*'uccāk* 'camels'; *pif* 'lung'—*piffāk* 'lungs'; *kaD* 'pit'—*kaDDak* 'pits'. Gemination of the final consonant in words of this type also takes place when they are followed by another word beginning with a vowel, both the words being pronounced as a single intonation unit (e.g. positive Present tense forms of the link-verb *anning* 'to be', Present-Future or Past Continuous forms of verbs with the prefix *a-*, etc.), e.g. *dā 'ullT asīlō asīTT e* 'this horse is a thoroughbred one' (with *asīT* 'one'); *'icc atifara* 'I will not give anything' (with *'ic* 'nothing').

Gemination of consonants in verb forms takes place when a suffix beginning with a consonant is added to short monosyllabic stems ending in a vowel, e.g. *bass* 'he came' (from the stem *ba-* and the tense formant *-s-*), *atippēre* 'you do not understand' (from the stem *ati-* and the negative form formant *-p-*), *kattavēs* 'you did not do' (from the stem *ka-* and the negative form formant *-ta-*). Exceptions are the negative forms of the verbs *banning* 'to come', *manning* 'to become' and *tinging* 'to give', in which no such gemination occurs.

AN EXCURSION INTO THE HISTORY OF SOUNDS

The sound correspondences established in the comparative phonetics of Dravidian languages over the last decades make it possible to get a general idea of the history and development of individual sounds in Brahui words of Dravidian origin proper. It should be borne in mind, however, that the correspondences under consideration have in most cases been established only with respect to the first (root) syllable, and that the causes determining the different development of the same sounds are often still unknown.¹⁴

¹⁴ As M.B. Emeneau notes, "In numerous etymologies the etymologists fail to show the correspondences stated. Most frequently this happens because the statements given are too simple and need to be qualified in terms of the phonetic or morphological contexts. Often enough, however, such qualifications have not yet

Brahui sounds	Proto-Dravidian sounds	Examples from Brahui ¹⁵
a	a e o	<i>xan</i> 'eye' : *kaN <i>xaf</i> 'ear' : *kevi <i>xal(l)</i> - 'to kill' : *kol-
ā	ā	<i>pālh</i> 'milk' : *pāl
i	i e	<i>bil</i> 'bow' : *vil <i>mir</i> - 'to smear' : *meZ-
ī	ī	<i>dīr</i> 'water' : *nīr
u	u o	<i>mutkun</i> 'old' : *mut(t)- <i>curr</i> - 'to flow out' : *cor-
-k-	k	<i>kēragh</i> 'bottom' : *kTZ-
-x-	k	<i>xan</i> 'eye' : *kaN
c-	c	<i>curr</i> - 'to flow out' : *cor-
k-	c	<i>kubēn</i> 'heavy' : *cuma- 'to lift'
b-	v	<i>ba(r)</i> - 'to come' : *var-
-r-	r R r' L Z	<i>bar</i> - 'to come' : *var <i>tōr</i> - 'to hold' : *toR- 'to touch' <i>xar</i> 'angry' : *kar ^r - 'black' <i>urā</i> 'house' : *uL 'inside' <i>kēragh</i> 'bottom' : *kTZ

been discovered¹⁵ 30, 19/. As Emeneau stresses in another place, "Brahui is most tantalising because of the meagreness of its inherited Dravidian vocabulary. This very meagreness makes it at times difficult to state phonetic correspondences or to identify etymologies with any confidence" /26, VII/.

¹⁵ For detailed etymologies, see *A Dravidian Etymological Dictionary* by T. Burrow and M.B. Emeneau /16/.

Brahui sounds	Proto-Dravidian sounds	Examples from Brahui
-rr-	r	<i>karrak</i> 'bank' : * <i>kara</i>
	R	<i>xarr-</i> 'to walk' : * <i>kaRa-</i> 'to cross'
	rʳ	* <i>arr-</i> 'to tear' : * <i>arʳ-</i>
-l-	l	<i>bil</i> 'bow' : * <i>vil</i>
	L	(ʳ) <i>ūl-</i> 'to howl' : * <i>ūL-</i>
-lh-	l	<i>pālh</i> 'milk' : * <i>pāl</i>
	L	<i>tēlh</i> 'scorpion' : * <i>tēL</i>
	x	<i>malh</i> 'son' : * <i>maxa</i>

The thinness of the layer of Dravidian words preserved in Brahui makes it considerably more difficult to establish correspondences in a number of other cases and, as noted by M.B. Emeneau /26, VII/, often hampers the researcher's efforts to determine other conditions under which this or that correspondence has the meaning of an irrevocable phonetic law. Such, for example, are: Br. *ē* : **ā* (Br. *tēn* 'oneself' : **tān*), Br. *ī* : **ā* (Br. *ī* 'I' : **yān*), Br. -*b-* : **m-* /Br. *kubēn* 'heavy' : **cum(a)-* /, Br. *a* : **i* (Br. *ar-* 'to be' : **ir-*, Br. **anēn* 'sweet' : **in-*).¹⁶

¹⁶ The last correspondence has been established by D. Bray. M.B. Emeneau does not consider it sufficiently convincing.