

Sindebele (also known as Zulu) is a member of the Bantu language family, Narrow Bantu "S" in particular. There are about 6.026 million (1987) speakers Sindebele speakers in the African states of Zululand, Natal, South Africa, Lesotho, Swaziland, and Malawi. It is used in secondary education and in the media. The speaker in this recording is a male in his twenties from Zimbabwe.

### Sindebele Consonant Phonemes:

Stops:	p'	t'			k k'	
	p <sup>b</sup>	t <sup>h</sup>			k <sup>h</sup>	
	b	d			g	
Fricatives:	f	s	ʃ	ʃ	x	h
	v	z	ʒ			fi
Nasals:	m	n		ɲ	ŋ	
Liquids:			l			
Glides:				j	w	

/b/ occurs as /β/ in some environments. Voiceless stops that follow nasals are allophonically ejective. Doke (1926) reports several "rare" sounds (although he doesn't make it clear whether or not they are phonemic):

1) two bilabial "trills" ([p] & [b]) - the lips open and close rapidly due to Bernoulli force

2) the voiced bilabial fricative, [β] - apparently this sound has become more frequent as this speaker uses it often and in seeming contrast to /v/.

3) the voiced alveolo-palatal fricative, [ʒ] - other than in the affricate [dʒ], it occurs rarely, most notably in singing; it is the Sindebele equivalent to "la la la".

4) a glottal nasal, [fi] - articulated as a voiced glottal fricative but with the velum lowered.

5) [r, ɾ] occur in examples of onomatopoeic words concerning the flight of birds.

### Affricates:

labio-dental	alveolar	lateral	pre-palatal	velar
pf'	ts'	tʃ'	tʃ <sup>h</sup>	kx'
			tʃ <sup>h</sup>	
bv	dz	dʒ	dʒ	
				kL'

Affricates developed from homorganic nasal + fricative combinations and all voiceless affricates are ejective. In the case of /m/ + /f/, place assimilation occurs and the nasal, and both portions of the resultant affricate are labio-dental. Doke (1926) claims that [ʃ] is farther back in what he calls a "pre-palatal" position ([ç]?). [ɲ] apparently also occurs in this position and is not purely palatal. Naturally, when the two combine and create an affricate, the

stop portion is also articulated in as “pre-palatal”. The combination of [ŋ] and [t] resulted in the assimilation of the fricative to a velar position. Hence as voiceless, velar, lateral, ejective, affricate is formed (here L is used to represent a velar, lateral fricative).

### Clicks:

	Dental	Palatal	Lateral
Unvoiced:	k	k'	k l
Aspirated:	k  <sup>h</sup>	k'  <sup>h</sup>	k l <sup>h</sup>
Voiced:	g	g'	g l
Nasal:	ŋ	ŋ'	ŋ l

Note the symbols used here are not IPA, but are what have been traditionally used by researchers of African languages. Doke (1926) disagreed with combining symbols to represent the clicks because he feels it is misleading. He presents the IPA symbols for the unvoiced and aspirated series and invents six more to describe the voiced and nasal series.

### Consonants Exhibited:

Stops:	p	t	k
		t'	k'
	p <sup>h</sup>	t <sup>h</sup>	k <sup>h</sup>
	b β	d	g
Fricatives:	f θ ɬ	s	ʃ h
	v β	z	ʒ
Affricates:		tʃ	tʃ
Nasals:	m	n	ɲ ŋ
Liquids:		l	
Glides:			j w
Clicks:	k	k l	k'
	k  <sup>h</sup>	k l <sup>h</sup>	k'  <sup>h</sup>
	g	g l	
	ŋ	ŋ l	ŋ'

Please note that the major reference for the phonemes in Zulu is quite old and that of course, there is likely to be a great deal of diachronic variation, especially because of the increased influence of non-African languages like English.

Sindebele Vowel & Diphthong Phonemes:

i	u	ij	
e	o	ɔe	ow
ɛ	ɔ		
	a		ɔa

In contrast to it's consonant system, the Sindebele vowel system is quite simple. Vowels bearing stress are lengthened. Doke (1926) additionally reports two lateral vowels [ɰ] and [ɰl] that developed from /li/ and /lu/ respectively.

Vowels Encountered:

i		u
		ɰ
e	ɔ	o
ɛ		ɔ
	a	

Sindebele Tonemes:

Tone in Sindebele is an extremely complicated matter as tone is significant lexically, grammatically, and in intonation (ex. sarcasm). Doke (1926) reports no less than 9 significant tonal levels (1- highest, 9 - lowest) and using this measurement scale isolates tonemes based on the number of syllables in a given word. There are 6 distinct lexical tonemes each for mono, bi, and tri-syllabic words, making a total of 18. Because of the interaction of grammatical tone and sentence intonation there are literally dozens of "allotones".

I. Spontaneous SpeechII. Word ListsPlosives:

- |    |                       |                    |
|----|-----------------------|--------------------|
| 1. | [βaβa]                | "to be bitter"     |
| 2. | [βaβa]                | "to catch"         |
| 3. | [βa:na]               | "to shovel"        |
| 4. | [p <sup>h</sup> a:na] | "give one another" |
| 5. | [vɛ:t <sup>h</sup> a] | "to blow"          |
| 6. | [be:ta]               | "to talk nonsense" |
| 7. | [βɔ:ŋa]               | "be thankful"      |
| 8. | [pɔ:ŋa]               | "to roar"          |

9.	[pɔɔɔ]	"drooping"
10.	[p <sup>h</sup> ɔ:ɔɔ]	"protruding"
11.	[pɔ:ga]	"to be serious"
12.	[p <sup>h</sup> a:gu]	"of slapping"
13.	[ta:gu]	"of flapping" (?)
14.	[wa:gu]	"of chewing grass"
15.	[βa:la]	"to count"
16.	[pa:la]	"writing"
17.	[p <sup>h</sup> a:tʰa]	"to encircle"
18.	[t <sup>h</sup> e:βa]	"to be springy"
19.	[tepa]	"be indifferent"
20.	[t <sup>h</sup> e:βe]	"flatness"
21.	[da:da]	"to urge"
22.	[t <sup>h</sup> a:t <sup>h</sup> a]	"to take"
23.	[da:da]	"duck"
24.	[ba:ta]	"to seal something"
25.	[da:ga]	"to intoxicate"
26.	[t <sup>h</sup> a:a]	"to mix up"
27.	[ga:βi]	"badly"
28.	[k <sup>h</sup> a:βa]	"to kick"
29.	[ga:βa]	"to divide"
30.	[ga:nɛ]	"once"
31.	[k <sup>h</sup> a:nɛ]	"light"
32.	[ga:nɛ]	"outdo"
33.	[go:la]	"a wild cat"
34.	[um:bu:t <sup>h</sup> u]	"seclusion"
35.	[uləkʊ:t <sup>h</sup> u]	"bad humour"
36.	[amak <sup>h</sup> osi]	"kings"
37.	[amakosi]	"corner"

#### Fricatives:

1.	[laŋalɛ:lo]	"on that day"
2.	[kʰaŋalala]	"to rage"
3.	[tʰaŋa:na]	"come together"
4.	[bu:lu]	"rambling talk"
5.	[bu:ɬu]	"of stabbing"
6.	[lɔlɔ:za]	"to level"
7.	[kʰɔkʰɔ:ma]	"act threateningly"
8.	[tʰole:la]	"a bad omen"
9.	[la]	"then"
10.	[kʰana]	"eat! (imperative)"
11.	[tʰatʰa]	"to chop up"
12.	[nʰantʰa]	"luck"
13.	[paʰa:za]	"smash/ blurt out"
14.	[kuʰu:za]	"to shake"

15.	[its'a:(ɾ)go]	"gap in teeth"
16.	[tʃ'ala]	"to plant"
17.	[ts'e:mɛ]	"sponginess"
18.	[tʃ'e:la]	"to tell"
19.	[ts'o:ts'i]	"thief"
20.	[gatʃa:na]	"far away"
21.	[ugu:fa]	"to die"
22.	[va:la]	"close"
23.	[fɛfɛ:za]	"sprinkle/ drizzle"
24.	[ve:va]	"to quiver"
25.	[ilifɔɔfɔ:ɔ]	"dishonest person"
26.	[uvɔɔvɔ:ɔ]	"revolver"
27.	[ulufu:t <sup>h</sup> u]	"stench"
28.	[ilivu:t <sup>h</sup> a]	"desert soil"
29.	[su:la]	"to wipe"
30.	[zu:la]	"to wander about"
31.	[ʃi:nda]	"to be heavy"
32.	[zu:lu]	"heaven"
33.	[isitula]	"a fat person"
34.	[iʃiʃa]	"tenderness"
35.	[ili:za]	"weave"
36.	[ta:ja]	"to strike"
37.	[iʃifo:mo]	"cluster"
38.	[ufu:fu]	"hot spring"
39.	[xe:xa]	"to split open"
40.	[xe:ma]	"gash"
41.	[ho:la]	"to drag"
42.	[hu:la]	"cut down"
43.	[ilixexe:βa]	"a rough surface"
44.	[iliho:pu]	"a stack"

#### Palatal Consonants:

1.	[naga:za]	"make spotted"
2.	[ɲaga:za]	"to move about"
3.	[ni:na]	"to prevent"
4.	[ɲi:ɲa]	"compress together"
5.	[ɲo:βa]	"because"
6.	[nk'obola]	"to kill by a blow to the back of neck"
7.	[nge:na]	"to enter"
8.	[k'ene:za]	"to resound"
9.	[muɲ:a]	"to enclose"
10.	[ɲk'uku:za]	"gnaw on a bone"
11.	[isinga:ni]	"a very close friend"
12.	[izink'ani]	"stubbornness"

Dental Clicks:

- |    |                        |                       |
|----|------------------------|-----------------------|
| 1. | [k  a:ga]              | "to be emaciated"     |
| 2. | [ŋ  a:ga]              | "strike in face"      |
| 3. | [g  a:ga]              | "to become emaciated" |
| 4. | [ŋ  a:ga]              | "of pounding"         |
| 5. | [t <sup>h</sup> ag  a] | "sticking flat"       |
| 6. | [fik  e:la]            | "to print"            |
| 7. | [bog  a]               | "to beat"             |
| 8. | [wək  ɔ:za]            | "to dent in"          |

Alveolar Lateral Clicks:

- |    |                           |                     |
|----|---------------------------|---------------------|
| 1. | [k    ok    a]            | "to narrate"        |
| 2. | [k    ok    o]            | "frog"              |
| 3. | [k    <sup>h</sup> o:sa]  | "S. African tribe"  |
| 4. | [g    og    o]            | "of hopping"        |
| 5. | [ŋ    ɔt <sup>h</sup> o]  | "to be embarrassed" |
| 6. | [ŋ    o:gl   o]           | "narration"         |
| 7. | [p <sup>h</sup> o:k    a] | "to embarrass"      |
| 8. | [vok    uta:ga]           | "to tread mud"      |

Palatal Clicks:

- |    |                          |                               |
|----|--------------------------|-------------------------------|
| 1. | [k! <sup>h</sup> i:na]   | "to be firm"                  |
| 2. | [k! <sup>h</sup> i:na]   | "to braid hair"               |
| 3. | [k! <sup>h</sup> ina:x]  | "treat with medicinal charms" |
| 4. | [ŋ! <sup>h</sup> i:na]   | "cut off tail"                |
| 5. | [ŋ! <sup>h</sup> imu:la] | "to throw down in a heap"     |
| 6. | [shak! <sup>h</sup> ]    | "finish off"                  |
| 7. | [ve:k! <sup>h</sup> u]   | "scampering"                  |

More Clicks:

- |     |                          |                                   |
|-----|--------------------------|-----------------------------------|
| 1.  | [k  u:la]                | "to sing"                         |
| 2.  | [k    u:la]              | "to grab at"                      |
| 3.  | [ik! <sup>h</sup> o:lo]  | "back"                            |
| 4.  | [ba:gl a]                | "to hide oneself"                 |
| 5.  | [imba:k    a]            | "fork"                            |
| 6.  | [fik! <sup>h</sup> i:za] | "to squeeze out"                  |
| 7.  | [k  <sup>h</sup> e:la]   | "to ask"                          |
| 8.  | [g    ubu]               | "sound of stone falling in water" |
| 9.  | [k! <sup>h</sup> ini:so] | "truth"                           |
| 10. | [ŋ  we:le]               | "holy"                            |
| 11. | [g    ume:ga]            | "to plant something"              |

III. Tongue Twisters

IV. Folk Songs

V. English Alphabet

References:

- Doke, Clement M. 1926. The Phonetics of the Zulu Language. Johannesburg: University of Witwatersrand Press.
- Lanham, L.W. 1969. Generative Phonology of Nguni Consonants. *Lingua* 24. 155-162.