TEXT-BOOK
OF
ZULU GRAMMAR

CHAPTER 1
THE PHONETICAL STRUCTURE OF THE ZULU LANGUAGE

§1.—In Zulu, speech sounds are divided into two main classes, vowels and consonants. The consonants, however, are sub-divided into 'plain consonants' and 'click consonants'. Three charts are therefore necessary for the purpose of tabulating Zulu speech sounds according to the two dimensions of manner and position. The vowel system of Zulu is remarkably simple, but among the consonants are several sounds foreign entirely to European languages. The clicks, as regularly-used speech sounds, are a foreign element in a Bantu language; and, of Bantu languages, it is only the South-eastern section which employs them. The clicks have evidently come into Zulu through Hottentot and Bushman influence.

The Vowels

§2.—Chart of Zulu Vowels, showing comparison with

the 'Cardinal Vowels' as employed by the 'International Phonetic Association'.

Zulu, like other Bantu languages, has three basic vowels, \(a\), \(i\) and \(u\). The mid-forward vowels, \(e\) and \(e\), are secondary in value, and are often the result of the coalescence of \(a\) and \(i\); similarly the mid-back vowels, \(o\) and \(o\), are secondary in value, often being the result of the coalescence of \(a\) and \(u\). In Zulu the close vowel \(e\) and the open vowel \(e\) are really two exemplifications of one vowel, and their occurrence depends entirely upon definite phonetic rules, which will be explained. The same remark applies to the close vowel \(o\) and the open vowel \(o\). Owing to the existence of these definite rules, it is unnecessary to use the symbols \(e\) and \(o\) in writing Zulu.

Each of the vowels in Zulu may be used long or short. There is also a half-length, which, however, is not considered to be of sufficient significance to be recorded in this grammatical work.

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lower than for Cardinal Vowel No. 2. Lips decidedly spread. This is a pure vowel, and must be distinguished from the normal Southern English diphthong ei, as in 'way' (phon. we:). It is approximately the same as the first element in that diphthong.

Examples:

leli (this)
phuzulu (above).

(ii) e (open mid-forward vowel): Slightly lower tongue position than that for Cardinal Vowel No. 3, but must be differentiated from the Southern English diphthong ei in such words as 'wear' (phon. we:). This is a pure vowel, and is approximately the same as the first element in that diphthong.

Examples:

wena (phon. we:na, thou)
dakhhe (phon. ena:ke, his).

§ 7. — o (the mid-back vowel): This symbol, as used in the present orthography, stands for two definitely distinct vowels, viz. o and ə, the former a close vowel, and the latter an open vowel.

(i) o (close mid-back vowel): Tongue position slightly lower than that for Cardinal Vowel No. 7. Lips fully rounded and protruding. This is a pure vowel and is pronounced much as the Northern English in 'no'. The Southern English pronunciation is phonetically ə:u, and the Zulu sound is much as the first element in that diphthong.

Examples:

loko (this)
olubisi (in the milk).

(ii) ə (open mid-back vowel): Tongue position slightly lower than that for Cardinal Vowel No. 6. Lips well rounded and somewhat protruding. This is a pure vowel, and its acoustic effect is somewhat that of the vowel in the Southern English pronunciation of 'or', more closely resembling, however, the first part of the diphthong in 'boy' (phon. boi).

Examples:

lelo (phon. lo:lo, that)
inkono (phon. ink'ona, beast)
bona (phon. bo:na, see).

§ 8. — Rules governing the quality of mid-forward and mid-back vowels:

Rule 1: If the vowel of the succeeding syllable in the same word (or word-group) be i or u, or if the succeeding syllable consist of syllabic n, the mid-forward and mid-back vowels are of high quality.

Examples:

nelifa (with the inheritance)
aheingu (white-people)
nomuthi (and the tree)
angiboni (I do not see).

Rule 2: If the vowel of the succeeding syllable in the same word (or word-group) be other than i or u, the mid-forward and mid-back vowels are of low quality.

Examples:

lethela (phon. lethe:la, bring for)
nekono (phon. nek'ona, and the beast)
skona (phon. fo:na, set)
lowo (phon. lo:wo, that).

Rule 3: If the mid-forward or mid-back vowel be long and in a position where there is no main stress, it is always of high quality, despite the quality of the vowel of the succeeding syllable.

Examples:

ne:kanda (and the head)
leyá (phon. le:já, yonder one)
no:boni (with lightning)
o:mame (our mothers).

There are some further subsidiary rules, observable upon a more minute phonetic study, which are not included here; cf. Doke: The Phonetics of the Zulu Language, ch. II, § 6.

All plurals of Class Ia thus take the prefix o: (high quality); and it is noticeable from this rule that phonetic ə: and ə: (long) are never found apart from main stress.
§9.—Zulu Diphthongs:

The existence of diphthongs in Zulu has hitherto been overlooked. There seems to be no real need to distinguish them in ordinary Zulu writing, but their occurrence explains some otherwise difficult forms. The two commonest diphthongs are the rising diphthongs sa and se, which, in this orthography, are written as wa and we. These occur usually in diminutives and locatives formed from nouns ending in -o.

Examples:

intwana (phon. int'wa:na, little thing)
isifwana (phon. isifwa:na, slight disease)
esilweni (phon. esilwe:ni, to the leopard)
ephuphweni (phon. ephupho:ni, in a dream)
esimwenni (phon. esimwe:ni, in the form).

From the two last examples it is seen that the Zulu rule, that w cannot follow a bi-labial consonant, is not really broken, as it appears to be.

The peculiar diphthong found in the plurals of Class 6 nouns, of which the stem commences in y, w, h, etc., is in reality a long -i, which becomes nasalised half-way through.

The diphthong ou occurs in a few exclamations, such as hou:, indicative of irritation.

§10.—Vowels in juxtaposition in Zulu always constitute separate syllables, and are written with a semi-vowel separating them, e.g.,

hhyi (no!)
pevula (push over)
ayike (well!)
gawula (chop down).

§11.—Chart of Zulu Plain Consonants:

<table>
<thead>
<tr>
<th></th>
<th>Bi-labial</th>
<th>Denti-labial</th>
<th>Alveolar</th>
<th>Pre-palatal</th>
<th>Velar</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosive</td>
<td>p</td>
<td>t</td>
<td>k</td>
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<td></td>
<td>ph</td>
<td>dh</td>
<td>hh</td>
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<tr>
<td>Implosive</td>
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<td>Nasal</td>
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<td>n</td>
<td>ny</td>
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<td>Fricative</td>
<td>f</td>
<td>s</td>
<td>sh</td>
<td>(h)</td>
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<td>Rolled</td>
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<td>Lateral</td>
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<tr>
<td>Affricate</td>
<td>mf</td>
<td>ts</td>
<td>(tsh)</td>
<td>jnj</td>
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<td></td>
<td>mv</td>
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<tr>
<td>Lateral-Affricate</td>
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<td>ndl</td>
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<tr>
<td>Semi-Vowels</td>
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<td>w</td>
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</table>

§12.—Explanation of Chart and terms used:

The vertical columns indicate the place of formation of the consonants, descriptive of the organs of speech which are used in forming the sounds. Bi-labial indicates that the two lips are used in the production of the sound; Denti-labial, that the upper teeth are against the lower lip; Alveolar, that the tongue-tip is against the teeth-
ridge or alveolar (that part of the hard palate which presents a convex surface to the tongue); *Prepalatal*, that the front (not tip) of the tongue is against that part of the palate which is between the teeth-ridge and the true hard palate; *Velar*, that the back of the tongue is against the soft palate or velum; and *Glottal* indicates sounds made in the throat.

The horizontal columns indicate the manner of production of the consonants. *Explosives* are formed by momentary complete closure of the air-passage; the air is obstructed and, on release, issues suddenly with explosion. *Implosives* are also formed by a closure of the air-passage, but the air is rarefied by a lowering of the larynx, and on release of the obstruction a momentary inrush of air or ‘implosion’ takes place. *Nasals* are formed by a complete closure in the mouth, the velum being lowered, so that the air passes out through the nose only. *Fricatives* are formed by narrowing the air-passage between the articulating organs, so that the air issues with audible friction or hissing. The *Rolled* consonant is formed by a rapid succession of taps by the tongue-tip on the teeth-ridge. *Laterals* are formed by placing the tongue-tip against the teeth-ridge, and allowing the air to escape over the side of the tongue. *Affricates* are composed of an explosive consonant followed by its homorganic fricative; with *lateral affricates*, it is the homorganic lateral fricative which accompanies the explosive. The *Semi-vowels* are formed with the tongue and lips in the position for vowels, but the articulating organs are held so tensely that consonantalisation takes place.

Radical consonants are pronounced without any accompanying vibration of the vocal chords, or closure of the glottis, or aspiration. *Fricative* consonants are voiceless consonants accompanied by an appreciable break caused by the closing of the glottis (by bringing the vocal chords tightly together), between the enunciation of the consonant and that of the vowel following. *Aspirated con-

sonants are voiceless consonants followed by an audible rush of air through the open glottis. *Voiced* consonants are pronounced with accompanying vibration of the vocal chords.

§13.—Zulu Explosive Consonants:

Of velar explosives there are four types in Zulu, which must be distinguished carefully, viz., *k* (radical and ejective), *kh* and *g*; of alveolar explosives three types, viz., *t, th* and *d*; and of bilabial explosives three types, viz., *p, ph* and *b*.

§14.—*k*. This radical form is absolutely devoid of aspiration, and is sometimes mistaken by Europeans for *g*, as it has slight voicing. It may be termed ‘soft-*k*’.

Examples:

* u:hukela (River Tugela)
* kakhulu (greatly)
* ukukhaliphapha (to be wise).

This ‘soft-*k*’ is found in prefixes, *uku-, ku-, ka-*; in suffixes, *-ka, eka, -akala, -kazi*; in the infix *-ka-*; in such conjunctions as *kepha, kowwa, kanti*; and in the second syllable of many disyllabic verbs, e.g., *pheka, fika, beka, beka, suka, faka, muka, sikha, vuka, phika, silka, yeke, nika, kileka, caka, chaka, etc.* An initial vowel does not affect the position, e.g., *esuka, ethuka.*

§15.—*k* (phon. *k’*). The ejective form, or ‘sharp-*k*’, is always found after *n* (phon. *n*), e.g.: *nanki* (phon. *n:yi*k’i*), here it is)
* inhai* (phon. *i*yi*k’a:li*, ox).

Also found apart from *n* in a restricted number of words; e.g.: *kaka* (phon. *k’a:k’a*, surround)

* Ejective or ‘sharp-*t*’ is always found after *n*, e.g.: *nandi* (phon. *n:anidi*, here it is)

Also found apart from *n* in a restricted number of words; e.g.: *In Xhosa ejective *-k* takes its place.
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\(i:\text{itihihoye}\) (pee-wit)
\(i:\text{tende}\) (tent).

\(p\). Ejective or 'sharp-\(p\)' is always found after non-syllabic 
\(m\), e.g.:
\(\text{namp}\)a (phon. \(\text{n}:m:p:a\), here they are)
\(\text{imp}\)si (phon. \(\text{i}:m:p:s:i\), hyena).

Also found apart from \(m\) in a restricted number of words:
\(\text{e.g.}:\)
\(\text{pewuka}\) (fall over)
\(\text{isiphibizana}\) (stump of tail).

Note that in the new orthography the ejection of \(p\), \(t\) 
and \(k\) is not marked.

§16.—\(kh\). The aspirated form has much more aspiration 
(a stronger rush of air following it) than has the English \(k\).
Examples:
\(\text{khanya}\) (shine)
\(\text{isikhathi}\) (time).

It occurs commonly as the initial consonant in verbs and 
noun-stems, e.g., \(\text{khanya}\), \(\text{khipha}\), \(\text{khala}\), \(\text{kholwa}\), \(\text{kholwa}\), 
\(\text{kheha}\); \(\text{ukhezo}\), \(\text{umkhwane}\), \(\text{i:khanda}\), \(\text{isikhathi}\), \(\text{i:khaya}\), 
\(\text{umkhonto}\); and such qualifying stems as -\(khulu\), -\(khali\).

It is very important to distinguish the ejective from the 
aspirated types of \(k\). Note the following pairs:
\(\text{kaka}\) (encircle) \(\text{khakha}\) (be acrid)
\(\text{kela}\) (wear down) \(\text{khela}\) (place slantwise)
\(\text{koka}\) (surround) \(\text{kokhha}\) (be prepared to strike).

\(th\). More strongly aspirated than English \(t\).
Examples:
\(\text{thanda}\) (love)
\(\text{umNthea}\) (Bushman).

It is very important to distinguish the ejective from the 
aspirated types of \(t\). Note the following pairs:
\(\text{thubha}\) (become darkened)
\(\text{thenga}\) (barter).

\(ph\). More strongly aspirated than English \(p\).
Examples:
\(\text{phuma}\) (go out)
\(\text{bopha}\) (tie).

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Words in which the change from \(p\) to \(ph\) causes semantic 
distinction are only found with some other harmonising 
change as well, e.g.:
\(\text{phothoza}\) (spit)  \(\text{phoshoza}\) (chatter)
\(\text{pektu}\) (of turning in- \(\text{phethu}\) (of crowding over).
side out)

§17.—Zulu \(g\), \(d\) and \(b\) differ from the corresponding English 
sounds in that they are devoid of voicing during the 'stop', 
unless preceded by the homorganic nasal; \(ng\), \(nd\) and \(mb\) 
(in which the stop of the explosive is nasalised and therefore 
voiced) are approximately the same as the English sounds 
in \(finger\), \(tinder\) and \(timber\); but Zulu \(g\), \(d\) and \(b\) \(^{1}\) are sharper, 
clearer sounds than their equivalents in English.

Examples:
\(\text{gula}\) (be ill)
\(\text{lingana}\) (be equal)
\(\text{amadoda}\) (men)
\(\text{indaba}\) (affair)
\(\text{beka}\) (look)
\(\text{imbusi}\) (goat).

§18.—The glottal explosive, or 'glottal stop', is practically 
restricted in Zulu to its accompaniment with voiceless 
explosives and voiceless affricates, causing the phenomenon of 
ejection. This glottal explosive may be indicated by 
the apostrophe, '\'.

§19.—The Bi-labial Implosive :
This sound has been misunderstood by students of Zulu. 
Most grammarians have called it 'soft-\(b\)', and have 
compared it with English \(b\), from which it is totally distinct. 
The phonetic symbol \(\beta\) is used to indicate it. As a matter 
of fact the implosive sounds are allied to the clicks in that 
there is an amount of suction or intake of air in their 
production. In pronouncing this sound, the lips are brought 
together, and then a rarefaction is formed by the enlargement 

\(^{1}\) Explosive \(b\) has often been written \(bh\) in Zulu. This is incorrect. 
There is no aspiration in the sound, and \(b\), \(d\) and \(g\) have all precisely 
the same phenomena.
of the air-passage above the larynx, by moving the larynx down; so that, on releasing the lips to pronounce a voiced bi-labial sound, the air momentarily rushes in to fill the rarefied space, a kind of ‘inverted-b’ being the result, followed immediately by the out-breathed vowel. Beginners should practise, in front of a mirror, lowering and raising the larynx at will.

Examples:

- ubaba (my father)
- abalitii (two).

The distinction between b and d is extremely important. Notice the following pairs:

- beka (look)
- bera (put)
- baba (entrap)
- baba (be acrid)
- biza (have concern)
- biza (call)
- bonga (roar)
- bonga (praise)
- buza (buzz)
- buza (ask).

§20.—The Nasal Consonants:

m (bi-labial nasal). Pronounced as in English, found before vowels and before p and b.

Examples:

- umama (my mother)
- hambha (travel)
- izimpapha (feathers).

m, before the denti-labial fricatives f and v, is not bi-labial; it is pronounced with the upper teeth touching the lower lips, and not with the lips meeting. Phonetically it should be written m. After it really become affricates, the former being ejective; but, in this orthography, the symbols mf and mv are used to represent these sounds.

Examples:

- imfene (phon. imaf'e:ne, baboon)
- imnev (phon. imaf:ne, sheep).

m (syllabic bi-labial nasal). This, phonetically represented by m, is a contraction of Bantu mu- and sometimes of mi-. It must be remembered that this m constitutes a complete syllable, and has the influence of the vowel u

or i. Syllabic m may thus be used before any consonant, but never precedes a vowel.

Examples:

- umungane (friend)
- nga:mbona (I saw him)
- wa:mmminza (he swallowed him).

Note that final syllabic -m is written -mu, e.g.,

- isidamu (gun) is pronounced isibam.

n (alveolar nasal). Pronounced as in English, found before vowels and in the following combinations:

- mw, nt, nd, ns (phon. nts’), nz (phon. ndz), nhl (phon. ntl) and ndl (= nd + dl).

Examples:

- unina (his mother)
- izinwele (hair)
- intamo (neck)
- induku (walking-stick)
- insimu (garden)
- amanzi (water)
- inxiliyo (heart)
- amandla (strength).

ny (prepalatal nasal). Intermediate in formation between English ‘ny’ and French ‘gn’. This sound in Zulu is formed by placing the front (not tip) of the tongue against the division of the teeth-ridge and hard palate proper. It occurs before vowels and w, when the digraph ny is used, but when occurring before prepalatal consonants it is written n, as in ntshe (phon. njf:) and nj (phon. ndz).

Examples:

- nyinya (squeeze together)
- ntshe (ostrich)
- inja (dog)
- isanywane (unpopularity).

n (velar nasal). This nasal, phonetically n, is pronounced as the Southern English ‘ng’ in ‘sing-song.’ In Zulu this is
found before k, g and kl. Some Zulu speakers substitute the velar sound of n (ŋ) for ng.

Examples:

nanhu (here it is)
nga:ngihamba (phon. nga:ngiha:mba or nga:ngiha:mba, I was travelling)
ukunziinkliza (to make a choking noise).

Velar n is also used before voiced and sometimes radical clicks, e.g.:

ingcebo (richness)
ggangkula (jump about).

The nasal clicks will be noted later.

§21.—The Morphological Influence of the Nasals:

When homorganic nasals1 come before certain consonants, these consonants may undergo phonetic change, as follows:

(1) Aspirated explosives become ejecutive, e.g.:

u:phaphe (feather) pl. izimphaphe (phon. izim'p'he)
uthi (stick) pl. izinti (phon. isi:n'ti)
u:khelo (spoon) pl. izinkhelo (phon. isi:nk'e:zo).

(2) Aspirated clicks become nasal clicks, e.g.:

chwaya (perform hut-dance) incwayi (hut-dancer)
i:ghubu (bulge) ingubu (bend in river)
u:zhushela (sharp instrument) pl. izimzushela.

(3) Radical clicks become voiced,2 e.g.:

u:cezu (slice) pl. izingcezu
u:qweqwe (scab) pl. izingqweqwe
xoxa (relate) ingxoxo (account).

(4) Fricatives become affricates, radical fricatives becoming ejecutive affricates, and voiced fricatives becoming voiced affricates, e.g.:

u:fu:du (tortoise) pl. izimfudu (phon. izim'fu:du)
wwu (grey hair) pl. izimwu (phon. isi:nyou)
u:sku (day) pl. izinksuku (phon. isi:n'sku)
u:zi:pho (claw) pl. izinzipho (phon. isi:ndzi:pho)
u:shikisi (quarrel- some person) ki:fi

1 i.e., nasals of the same organic position.
2 Or sometimes nasal, cf. zi:ncezu, an alternative plural to u:cezu.

§22.—The Fricatives in Zulu:

f, v (denti-labial fricatives). Pronounced as in English.

Examples:

ukufuna (to want)
ukuvula (to shut).

s, z (alveolar fricatives). Pronounced as in English.

Examples:

ukusuka (to go away)
ukuzala (to beget).

sh (prepalatal fricative). Pronounced much as in the English word 'ship'.

Example:

ukushaya (to strike).

h (radical velar fricative). Phonetically this is represented by x, and has often been written in Zulu as 'r'. In practically every case this velar fricative is interchangeable with the glottal fricative in Zulu. Therefore no differentiating symbol is assigned to it. In pronunciation it is similar to the Scottish sound of 'ch' in 'loch', or the Afrikaans 'g' in 'gaan'. There is very little 'scrape', however, with this sound in Zulu.

Examples:

hola (phon. xɔ:la, drag)
hwithe (phon. xwi:tha, snatch).

The velar sound is also used as the emphatic form of h, thus:
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hamba (go) > hamba [phon. xa:mba, go!]

h, hh (glottal fricatives). The radical form, h, is pronounced as English 'h' in 'happy'.

Examples:

hamba (go)
ukuhaha (to be greedy).

hh represents the voiced form, akin in pronunciation to the Afrikaans 'h' in 'hand', only more fully voiced. To the ear this gives the effect of a roughening and strengthening of the succeeding vowel.

Examples:

i:khashi (horse)
u:khohho (large hut)
unokhemu (crested crane).

In many cases of low-toned wa and wu alternative pronunciations are found with 'hwa and 'hhu respectively, e.g.:

uwayiba (species of bird) or uwhwayiba
widlu (of scraping) or hhidlu.

§23.—The Rolled Consonant:

r, the voiced rolled lingual, is used in Zulu in imported words, such as umariya (Mary). Apart from this it occurs only in a few exclamatory or onomatopoetic words such as yathi ndr (it flew off), where r is syllabic.

§24.—The Lateral Consonants:

l (voiced alveolar lateral). Pronounced much as the English 'l' or 'l', but with the tongue-tip much further forward against the gum-ridge.

Examples:

lala (sleep)
oldula (light: Cl. 6).

It is noteworthy that in certain cases l and ru become lateral vowels, i.e., they are really i and u vowels with the tongue in the position for l throughout the enunciation.¹

¹It is, perhaps, too scientifically exact to give rules here, but see Doke, The Phonetics of the Zulu Language, ch. VIII, § 6.

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hl (radical fricative alveolar lateral). This sound (for which the phonetic symbol is t̚) is pronounced very much as 'll' in the Welsh 'Llanelli': It is a voiceless fricative sound with the tongue-tip kept approximately in the same position as for l.

Examples:

isihlabla (a bush)
namhlanje (to-day).

dl (voiced fricative alveolar lateral). Pronounced as hl, but with accompanying vibration of the vocal chords.

Examples:

ukulala (to eat)
u:dheshe (long staff).

§25.—The Affricates:

There are eleven affricate combinations in Zulu, of which six are ejective, i.e., accompanied by a simultaneous closure of the glotts, four are voiced and one radical.

nsf (denti-labial affricates). These, which are phonetically m̩sf̩ and m̩sf, are only found in conjunction with the denti-labial nasal.

Examples:

imfene (baboon)
imwula (rain).

ts, ns (alveolar affricates). The ejective form is found both without and with the nasal, in the latter case the combination being written ns (phon. ns'): the voiced only after the nasal, when ns is written instead of nds.

The difference between English ts and Zulu ts lies in the sharp ejection of the latter.

Examples:

tskeza (creak)
phansi (down)
yenza (do!).

ndl (lateral alveolar affricates). Found only in conjunction with the nasal. The phonetic equivalent of the unvoiced form is ndl.
Examples:
inhlunhla (good fortune)
indu (hut).

\(tsh, ntsh\) (prepalatal affricates). In organic position these correspond closely to the English consonantal sounds in 'church' and 'judge'. Both radical and ejective sounds occur, each written 'tsh'. The radical sound seems practically the same as the English. The ejective form is found both with and without the nasal. The voiced form occurs both with and without the nasal.

Examples:
tshetsha (hasten)—radical type
tshela (tell)
utshwala (beer)
ntshontsha (stea1)
ujojo (Kafir finch)
njalo (thus).

\(kl, nkl\) (ejective velar lateral affricate). This has been written variously hitherto as 'hx', 'italic x', 'rr' and 'kl'. It is produced in much the same way as the Zulu affricate in the combination \(nkl\), only much further back in the mouth, the back of the tongue operating upon the velum. It is wise for beginners, when practising, to keep the tongue tip down behind the lower teeth. A variant pronunciation of this sound is the ejective velar affricate (phon. \(kx\)'), pronounced over the centre instead of the side of the tongue. This sound has been mistaken for a click.

Examples:
kleweba (scratch)
nklinkliza (breathe with difficulty).

§26. — The Semi-vowels:
\(w\) and \(y\) are pronounced in Zulu much the same as in the English words 'wipe' and 'yet'.

Examples:
wenə (thou) yena (he).

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The Click Consonants

§27.—Chart of Zulu Click Consonants:

<table>
<thead>
<tr>
<th></th>
<th>Dental</th>
<th>Palato-alveolar</th>
<th>Lateral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radical</td>
<td>c</td>
<td>q</td>
<td>x</td>
</tr>
<tr>
<td>Aspirated</td>
<td>ch</td>
<td>qh</td>
<td>zh</td>
</tr>
<tr>
<td>Voiced</td>
<td>gc</td>
<td>eq</td>
<td>gx</td>
</tr>
<tr>
<td>Nasal</td>
<td>nc</td>
<td>nq</td>
<td>nx</td>
</tr>
</tbody>
</table>

§28.—There are two articulating positions of the tongue in the production of each click, and a click is thus a type of compound sound. A click may be defined as an injected consonant produced by a rarefaction between two points of closure of the tongue, one of these points of closure always being velar. The following diagram, illustrative of a dental click, wi l make this clear:

![Diagram of dental click]

The depression of the tongue-top causes a rarefaction between that and the palate. The release of the tip gives the suction sound, and is immediately followed by the release of the back, and the out-breathing of the vowel.
§29.—In Zulu, clicks are formed with three different positions of the tongue.

Dental clicks have back of tongue raised to touch soft palate (in position for k); tip of tongue is placed lightly against upper front teeth and gums; centre of tongue is depressed, and then the tip of the tongue is drawn backwards. The radical form of this click resembles the incomplete English click of annoyance, written as 'tut-tut'.

Palato-alveolar clicks have the back of the tongue raised to touch the soft palate; the upper part of the tongue-tip is pressed tightly against the division between the teethridge and hard palate; the centre of the tongue is depressed and then the tip of the tongue is drawn sharply downwards. The radical form of the resulting click resembles the sound of the drawing of a cork from a bottle.

Lateral clicks have the tongue position much as for the palato-alveolar, but the tongue-tip is not released. It is one side of the tongue against the upper side teeth which is withdrawn. The resulting click resembles the sound made by a 'canny' when urging his horses.

§30.—Each positional type of click may be enunciated in four ways, (1) radically, i.e., without voicing, aspiration or nasalisation, (2) aspirated, i.e., followed by a rush of air, (3) voiced, i.e., accompanied by vibration of the vocal chords, and (4) nasal, i.e., with the velum lowered so that air passes simultaneously through the nose.

§31.—c caca (scrape a wound)
ch chacha (shell beans)
gc geina (wax up hive)
nc uncence (tinkling thing)
nkc chónko¹ (of being on top)
ngc izingcu (rows of beads)
g quba (crouch down)
qh qhuba (drive)
geq isiggoko (hat)
ng injola (wagon)
nkq gqunkqa (fade)

¹Often heard as chongco, in either case the penultimate vowel is short.

§32.—It must be noted that the velar nasal consonant (written n) may appear before voiced clicks forming ngc, ngq and ngx. Very rare instances of the nasal before unvoiced clicks are found in Zulu; these are written nk, nkq and nxx, to distinguish them from the nasal clicks. The nasal with unvoiced clicks occurs very commonly in Xhosa.

§33.—Script forms of the non-roman symbol (lower case and capital) used in the new Zulu orthography:

§34.—Palatalisation:

In Zulu bi-labial consonants may not be followed by the semi-vowel ṃ. In some cases where this should synthetically take place, ṃ is dropped, e.g., in the possessive concord for Class 7, where ṃa- occurs instead of ṃw-. But in other cases, notably in the formation of noun-diminutives, locative adverbs and verb passives, the bilabial consonant gives place to a corresponding prepalatal sound. This is termed palatalisation. Instances of this will be fully dealt

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ngq izando (wooden trays)
x ixoja (relate)
xh xhosa (prod)
gx ugoxa (digging stick)
w inxi: (when)
wk xhankalaka (pound green roots)
ngx izando (digging sticks).
with in the body of the grammar. It is necessary here
to notice that, in Zulu palatalisation, the following
changes take place:
\[ p > tsh; \, ph > sh; \, b > j; \, b > tsh; \, m > ny; \, mp > ntsh; \]
and \[ mb > nj. \]
Palatalisation is not entirely confined to bi-labials, for in
diminutive formation alveolar explosives may be palatalised,
thus:
\[ t > tsh; \, th > sh; \, d > j; \, n > ny; \] rarely \[ nt > ntsh; \] and \[ nd > nj. \]

§35.—Elision of Vowels:
Apart from grammatical elision of initial vowels, as in
the formation of vocative interjectives, or after certain
adverbial formatives, elision of vowels takes place when
two words or word-groups merge to form a new word-group.
Elision in this way may be of two kinds: (1) elision of the
initial vowel of the second word (in which case it is com-
ulsory), or (2) elision of the final vowel of the first word (in
which case it is optional). The hyphenening of the word-groups
in compulsory elision is only used in this section of the
grammar.

§36.—Elision of the initial vowel takes place:
(1) after pronouns of the 1st and 2nd persons, e.g.:
\[ thina-bantu \] (we people)
\[ wena-noda \] (thou man)
\[ mina-muntu \] (I the person)
(2) after demonstrative pronouns, e.g.:
\[ lo-muntu \] (this person)
\[ leso-sihlalo \] (that chair).

§37.—Elision of the final vowel takes place:
(1) when nouns are followed by adjectives and
relatives in quick speech, e.g.:
\[ inkos'enkulu \] (a big chief)
\[ umnt'obomvu \] (a red person)
(2) when qualitative pronouns precede their nouns,
e.g.:
\[ abany'abantu \] (other people)
\[ ngibon'ababil'abantu \] (I see two people)
\[ obakh'ubuso \] (thy face)
\[ oz'umuntu \] (a naked person)
(3) when absolute pronouns of the 3rd person precede
their nouns, e.g.:
\[ zon'iizinkomo \] (they, the cattle)
\[ yeu'umuntu \] (he, the person)
(4) when enumerative pronouns precede their nouns,
e.g.:
\[ bonk'abantu \] (all people)
\[ lod'ukhuni \] (only firewood)
(5) when a verb is followed immediately by a word
commencing in a vowel, in quick speech, e.g.:
\[ ngifun'imali \] (I want money)
\[ asifun'ulibusoni:khashi \] (we do not
want to see the horse)
\[ bahambila'khaya \] (they went away from
home).

Of these cases of final elision, the elision is not essential
in Nos. (1) and (5); it takes place in quick or in usual
speech, but in deliberate speech no elision takes place. In
order to the simplification of reading and writing, it is best
to write each word separately in such cases, and to leave
it to the quick reader to elide. In Nos. (2), (3) and (4) the
elision, though not compulsory, is almost always made.

§38.—Coalescence of Vowels:
In order to understand the coalescence of vowels in Zulu,
the following diagram is useful:

---
1See also § 733.
2This may also be a vocative.
3Indicated by apostrophe.
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The Zulu basic vowel \( a \), when followed by the high forward vowel \( i \) may at times coalesce, and the resultant vowel is the intermediate forward vowel, \( e \) (or \( e \) according to the rules): in the same way \( a \) followed by \( u \) at times coalesces to form the intermediate back vowel, \( o \) (or \( o \)). Zulu coalescence, when it takes place, results, then, as follows:

\[
\begin{align*}
    a + i &= e \\
    a + u &= o \\
    a + a &= a
\end{align*}
\]

In Zulu the three vowels \( a, i, u \) of the greater triangle are primary vowels, while the three vowels, \( a, e, o \) of the smaller triangle are secondary vowels. Secondary vowels in Bantu have a different potentiality from primary vowels.

The following are the principal cases of coalescence:

1. with possessives:

\[
\begin{align*}
    wa- + umuntu & > womuntu \\
    wa- + imithi & > wemithi \\
    wa- + amakhosi & > wamakhosi
\end{align*}
\]

2. with the conjunctive formative, \( na- \):

\[
\begin{align*}
    nabanu (and people) \\
    nenkosi (and the chief) \\
    nomane (and my mother)
\end{align*}
\]

3. with the adverbial formatives, \( nga-, kuna-, njenga- \) and \( nganga- \):

\[
\begin{align*}
    ngakalina (by means of the boys) \\
    kunomuntu (rather than a person) \\
    njengezi (like dogs) \\
    ngangomntwana (the size of a child)
\end{align*}
\]

Length, Stress and Sound-groups

§39.—All human thought is expressed in sound-groups; and on analysis these sound-groups in Zulu are found to divide themselves as follows into:

1. Concept-groups, containing one or more
2. Sense-groups, which latter are made up of one or more
3. Words or Word-groups; and these words or word-groups may again be divided into one or more

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(4) Syllables. The syllables, on analysis, are found to contain one or more

(5) Elementary sounds.

As far as possible in a practical orthography a separate symbol has been employed to indicate each elementary sound, and these sound symbols have been joined to indicate syllables. The syllables again are joined to indicate words. It is found best not to indulge in elisions in writing, thus, as far as possible, the joining together of word-groups is avoided, a space being left separating one word from the other. Where, however, the compounding of words is essential, the hyphen has been employed. In reality, in Zulu, there is necessity for only two punctuation marks, which indicate the length of pause; the one, which is indicated by the comma, separates sense-groups, and the other, which is indicated by the full stop, separates concept-groups. Since intonation is not indicated, it is necessary to use the interrogation mark, and the exclamation mark.

Were intonation indicated, these would be superfluous.

§40.—There are four degrees of length of syllables, usually of vowels, found in Zulu, viz., (1) Short length, (2) Half-length, (3) Full length, and (4) Prolonged length.

§41.—Short Length. Short syllables are usually found where there is either no stress or only secondary stress. They are also found in many ideophones, even with main stress upon them. Short length is unindicated in writing, thus (\( a \)).

§42.—Half-length usually occurs when words are combined or reduplicated, and a long stressed syllable has lost its full length and stress. I have not considered it necessary to mark this in the present work. If necessary the upper dot of a colon may be used, thus (\( a' \)).

Examples:

\[
\begin{align*}
    lethi:yha:shi (bring the horse) \\
    ukusa:mbaha:mba (to walk about)
\end{align*}
\]

§43.—Full Length usually occurs in the position of main stress, but also apart from such position in various contractions. Full length is indicated by a colon, thus (\( a' \)).
It is very necessary to distinguish the full length from the short length, e.g.:

inka:bi (ox) and i:nka:bi (oxen)
{}

u:bo:vu (pus) and u:bo:vu (bog)
{}

ka:ha:mba (they travel) and ba:ha:mba (they travelled).
{}

Throughout this work the marking of full length is omitted where it occurs on the penultimate syllable, but is indicated in all other places. It must be pointed out, however, that in the new Zulu orthography for practical purposes, the marking of length is limited to instances in which confusion is otherwise likely to result, and then it is indicated by a doubling of the vowel.

§44.—*Prolonged length* occurs in ideophones or exclamatory words, and is indicated when necessary by a double colon, thus (:).

Example:

uku:thi ja: (to be stretched out).

§45.—In Zulu there are two types of stress, viz., Main Stress and Secondary Stress, upon words. There is no emphatic or sentence stress in Zulu. If emphasis is required upon any particular word, an alteration in the word order is usually made.

§46.—*Main Stress* (marked by acute accent): Normal main stress in Zulu, which is very pronounced, is on the penultimate syllable of the word, and is usually accompanied by full length of the vowel or syllabic nasal on which it rests, e.g.:

ngiyabò:nga (I am thankful).

When a word is increased in length by the addition of formative suffixes, the main stress automatically moves forward, e.g.: bò:na, borí:sa, bonah:la, bonakalí:sa, bona-kalisi:sa, etc.

§47.—*Secondary Stress* (marked by grave accent): This is not nearly so pronounced as main stress, and is found as a general rule, on every second syllable back from the penultimate of words with an even number of syllables. If the words have an odd number of syllables, more than three, the

secondary stress is found on the root syllable, and on every second syllable thereafter or therebefore, provided that at least one unstressed syllable is left before the main stress.

Examples:

a:thontwànyanyá:na (very small children)


§48.—Certain formatives have the effect of carrying forward the main stress:

(1) -ke (so !) phumái:ke (go out then !)
(2) -phí (where ?) wéndá:phí? (whence proceedest thou ?)
(3) -ni (what ?) bakondá:ni? (what do they see ?)
(4) -ze (naked) hambái:ze (travel naked)
(5) -yo (in relative olíkaniphílái:yó (who is wise). construction)

§49.—The formative -nje does not affect main stress, and is hyphenated to the word it follows, e.g.:

ngiyabó:na-nje (I see somewhat).

In this word the main stress is ante-penultimate.

§50.—Main stress is found in ultimate position as follows:

(1) Contracted verb perfects: sítóné:

(2) Copulatives and adverbs formed from monosyllabic demonstratives:

kuló (to this, contrast ku:lo, to it)
yíló (it is these).

(3) In ‘third’ demonstratives:

lahaphá: (yonder), leziyá: (yonder ones).

(4) In inxá: (when).

§51.—All monosyllabic words in Zulu have main stress,

e.g.:

u:ku:thi dú: (to be very quiet)

uyagú:la ndó: (is he ill ?)

umá:ntu ló (this person)

nxá: (when).
§52.—In certain words the penultimate main-stressed syllable is short, e.g.:
   (1) Disyllabic ideophones, e.g.: ukuthi bilihali.
   (2) Words such as gâde, kâde.

§53.—Since main stress usually falls on the penultimate syllable, I have decided to omit in this grammar the indication of stress, except when main stress falls on a syllable other than the penultimate or on that when the penultimate syllable is short. Stress is not indicated at all in the practical orthography.

§54.—From an examination of the part played by length and stress in Zulu, the following law of word-division is elucidated: **In each word or word-group there is one and only one main stress**, usually on the penultimate syllable, with secondary stresses falling at intervals. A word, then, is a mental concept signified by ‘a part of speech’ which has in itself a main stress, and thus may be pronounced alone, not necessarily attached to anything else. A word-group is a combination or fusion of two or more words brought about through vowel elision. Hence a word-group is easily split up into its component words, each of which is capable of being pronounced alone. Words may be further analysed into formative parts, but these formatives can never stand alone; they are not ‘parts of speech’, but merely ‘formatives in speech’. The word-group ngifuni ukuhamba is composed of two words ngifuni ukuhamba, and should be so written. The formatives ngi- and uku- should never be separated as they are not complete words, and have no main stress.

**Tone**

§55.—Tone or the sequence of musical pitch upon the syllables of words is very important in Zulu; for in Zulu, tone is semantic, that is to say, it is a factor governing the meanings of words.

§56.—In Zulu there are two types of tone: level tones and gliding tones. When using a level tone, one musical note is struck, and that pitch is maintained as long as the syllable lasts. With gliding tones the syllable commences on a certain musical note and glides to another during its duration. Gliding tones are, in Zulu, of three types: rising tones, falling tones and rising-falling tones. Rising tones glide up the scale, falling tones glide down the scale, while rising-falling tones commence at a certain musical note, glide up to a higher, and then before the completion of the syllable, glide down again to a lower.

§57.—The Zulu speaker employs a nine-tone system; that is to say, his range of tones in speech covers nine different pitches. These nine tone points cannot be indicated in musical notation, for they depend upon relative and not absolute height. The intervals between the notes are the important things. The whole range is generally slightly above an octave, with a man much lower in the scale than with a woman.

§58.—The following words illustrate the nine tones, which I indicate with figures, the highest tone being 1 and the lowest 9:

2 1 9  
ephathwa (he being touched)
3 2 9
umuntu (a person)
5 4
shaya (strike)
7 7 4
ngifuna (I wanting)
7 7 4
nofani (and so-and-so)
8 8 3 9
uyafuna (thou wantest).

§59.—The following words illustrate gliding tones:

3 3 5 4
anafana (heritances)
3 3 8 3
izwi (word)
3 8 3 9
imhizi (goat).

§60.—It is obvious that it is impracticable to employ such a system of tone-marking for ordinary orthographic purposes, and until further investigation reveals the underlying tone-laws in Zulu, and makes possible a simplified system of