## Language Specific Peculiarities Document for

## Zulu as Spoken in South Africa

## 1. Dialects

Zulu (isiZulu) is a member of the Nguni group in the Bantu language family of South-Eastern Africa. It is the language of the Zulu people and is spoken by approximately 10 million residents of South Africa and its neighboring states - Botswana, Lesotho, Malawi, Mozambique, and Swaziland (although few of those in South Africa's neighboring states are first-language speakers). It is the most common first language in South-Africa - spoken natively by nearly $23 \%$ of the population and understood by over $50 \%^{1}$ - and is one of the country's eleven official languages.


Figure 1. Reference map of South Africa with old province names ${ }^{2}$. Not to scale.

[^0]The Zulu language is predominantly spoken in the province of KwaZulu-Natal (KZN). This region, situated in the North-East of South Africa, is considered to be the homeland of the Zulu people and $80.9 \%$ of its population are native Zulu speakers ${ }^{3}$. Its largest city, Durban, boasts a level of $29 \%$ first-language Zulu speakers ${ }^{4}$. Zulu is also widely spoken in Mpumalanga province ( $26 \%$ of the population) and Gauteng ( $21 \%$ ). ${ }^{5}$
Two rural Zulu dialects have historically been recognized as the most prominent: Lala and Qwabe. These dialects show a wide distribution throughout rural areas of the KZN province. Broadly, Lala is spoken in Coastal Zululand (Northern coast of KZN) and southern Natal (South of Durban in KZN). Qwabe is spoken throughout the rural areas of KZN. ${ }^{6}$ Although these dialects are often mentioned in the literature on Zulu, speakers do not readily associate themselves with either one and the terms are considered to be somewhat outdated. Speakers of these dialects usually fall into an older demographic, are Zulu monolingual, and reside in rural areas.
To make matters more problematic, literacy levels decrease as you move further into rural areas. ${ }^{7}$ In 2001, KZN was the province with the highest number of adults (aged over 20) with no education at all and therefore presumably illiterate. This statistic is also augmented when viewed as proportion of race. $22.3 \%$ of black Africans in South Africa in 2001 had had no schooling whatsoever. ${ }^{8}$ It is therefore not recommended to attempt to collect data representative of these rural dialects as the speakers are isolated in rural areas and are more likely to be illiterate.
The distinction between rural and urban Zulu is akin to the distinction between 'standard' and 'urban' Zulu, where the 'standard' form has been less influenced by borrowings. ${ }^{9}$ Standard Zulu (isiZulu esijulile) is the language taught in schools and reflects a more 'purist' approach to language management. New Zulu derivations are preferred over loan words to accommodate new concepts. In contrast, urban Zulu (isiZulu sasedolobheni) is the predominant style of colloquial speech used by people living in large cities and allows many more loan words for new concepts, particularly from English. A good example is the standard Zulu word for a mobile phone, "umakhalekhukhwini", which is replaced in urban Zulu by the much shorter English borrowing "icell" (morphology is also applied that indicates the nativization of this word. It may also be spelled "iseli" or "iselula"). It is still the case, however, that literate urban speakers of Zulu are more aware of standard Zulu forms than rural speakers, motivated by first-language Zulu instruction in schools which is based on the standard (isiZulu esijulile).

[^1]In terms of urban dialects, there are several variants that are based around the urban centers of South Africa. The most salient difference between urban forms of Zulu is found between Johannesburg and Durban, where the Johannesburg variety shows lexical, phonetic, and morphosyntactic variation from the standard. However, the Johannesburg variety is still "by and large intelligible to KZN isiZulu speakers". ${ }^{10}$ The Johannesburg/Gauteng dialect has been heavily influenced by speakers from a variety of language backgrounds converging on this metropolis and learning Zulu as a second language. Gauteng is the main economic region of South Africa and so has attracted internal immigrants from a variety of language backgrounds. As such, Zulu speakers in Johannesburg and surrounds are more apt to use foreign borrowings from African languages and other non-standard forms, such as recent English borrowings. ${ }^{11}$ Lafon describes the language situation in southern Gauteng as one where Zulu has become the lingua franca between speakers of various languages. ${ }^{12}$

Zulu is closely related to other Nguni languages and is to a large extent mutually intelligible with each of Ndebele, Swati, and Xhosa. Some urban varieties of Zulu blur the lines between Nguni languages as speakers from different regions and language backgrounds are brought together. Speakers from non-Zulu backgrounds may introduce slightly different lexical items or variations in spelling. Code switching is also common in urban areas. This occurs between Zulu and the Sotho languages (Tswana, Sotho, Pedi), and also between Zulu and Afrikaans or English. ${ }^{13}$ Language mixing occurs most frequently in Gauteng where new varieties of existing languages have developed along a continuum within the complex sociolinguistic environments afforded by township communities, these are referred to as Tsotsitaals (isCamtho). ${ }^{14}$

There was also at one point a Zulu based pidgin, known as Fanakalo. This contained a mixture of English, Afrikaans, Zulu, and other African language vocabulary. It was used as a lingua franca especially amongst mine workers; however, it is seldomly used nowadays. ${ }^{15}$
Due to the potential severity of the standardization issues in the above-mentioned urban contexts, we have determined that the 'standard' Zulu dialect for the purpose of this project will be that spoken on the KwaZulu coast, around the cities of Durban and Pietermaritzburg. It is likely that some dialect contact and mixing occurs in these cities, especially in colloquial speech. However, this area should provide the best source of literate native speakers who have been educated in standard Zulu. As such, data collection will target 'standard' Zulu around Durban only. Below is

[^2]a summary of the dialect situation of the Zulu language to be used for reference, although only the KZN urban dialect will be represented in data collection.

| Country or Region | Districts or Cities |
| :--- | :--- |
| North Coast KZN - rural | Empangeni, Coastal Zululand |
| Southern KZN - rural | Southern Natal |
| KZN - urban | Durban, Pietermaritzburg |
| Gauteng - urban | Johannesburg |

## 2. Deviation from native-speaker principle

No special deviation - only native speakers of Zulu, born in South Africa will be recruited for this project.

## 3. Special handling of spelling

Zulu has a standardized orthography, however, as noted by Huyssteen, "There are serious inconsistencies in the application and interpretation of orthographical rules in general" in African languages including Zulu, and "Indigenous derivational patterns, rules for compounding or adoption of loans ... are not clearly reflected in Zulu grammars. Basically the standardization [sic] of word-formation patterns is largely lacking in the African languages, including Zulu". ${ }^{16}$ Van Huyssteen isolates the following four issues relating to inconsistencies in the application and interpretation of orthographical rules: old versus new orthography, lack of accuracy in morphological notation, capitalization, and changing linguistic trends which are not reflected in the orthography. ${ }^{17}$
For the purpose of this project, standard Zulu spelling will be used to the farthest extent possible. Inconsistencies in spelling will be targeted for close attention and resolution in the course of transcription. As references we will use Zulu dictionaries such as:

- Dent, G. R. \& Nyembezi, C. L. S. (2004). Scholar's Zulu Dictionary. New York: Hippocrene Books.
- Mbatha, M. (Ed.). (2006). Isichazamazwi SesiZulu. Pietermaritzburg: New Dawn Publishers.


## 4. Description of character set used for orthographic transcription

Zulu uses the Basic Latin Unicode range which is U+0041-U+007A.

## 5. Description of Romanization scheme

A Romanization scheme is not needed for this language.

[^3]
## 6. Description of method for word boundary detection

Word formation in Zulu results from extensive morphological processes that combine morphemes of different syntactic categories. Words in Zulu transcription are delimited by white space. ${ }^{18}$ Word delimitation in Zulu generally follows a conjunctive pattern, whereby morphemes are combined into larger word and phrasal units rather than separated by white space; however, there is some inconsistency in the application of this principle. According to Van Huyssteen, both conjunctive and disjunctive patterns have been applied in older Zulu grammars, and even "writers following the same approach do not always indicate word boundaries in the same manner". ${ }^{19}$ Writing disjunctively vs. conjunctively is the fifth area that Van Huyssteen identifies as most requiring attention in standardizing Zulu orthography, along with the four issues mentioned in section 3 above. ${ }^{20}$

In order to address this issue, scripts designed to detect inconsistencies in the placement of word boundaries will be applied to transcriptions, and training guidelines will address the issue of word boundary consistency. Further detail may be added to this section after initial transcription data has been processed.

## 7. Table containing all phonemes in the stipulated notation

The phonemic transcription of the words in this database uses X-SAMPA symbols, which can be found at http://www.phon.ucl.ac.uk/home/sampa/x-sampa.htm. The total number of phonemes is 46. There are 28 consonants, 2 semi-vowels, 7 vowels, and 9 clicks.

## ZULU PHONE CHART

| TYPICAL ZULU CORRESPONDENCE | IPA | X-SAMPA | Example |
| :---: | :---: | :---: | :---: |
| CONSONANTS |  |  |  |
| m | m | m | umama |
| n | n | n | unina |
| ny | n | J | inyoni |
| ng | $\eta$ | N | ingane |
| p | p' | p_> | ipipi |
| ph | $\mathrm{p}^{\text {h }}$ | p_h | -pheka |
| t | t' | t_> | itiye |
| th | $\mathrm{t}^{\text {h }}$ | t_h | -thatha |

[^4]| TYPICAL ZULU CORRESPONDENCE | IPA | X-SAMPA | Example |
| :---: | :---: | :---: | :---: |
| k | k' | k_> | kumnandi |
| kh | $k^{\text {n }}$ | k h | ikhanda |
| bh | b | b | bhala |
| d | d | d | idada |
| g | g | 9 | ugogo |
| b | 6 | b_< | bala |
| k | g | g_< | ukuza |
| f | f | f | ifu |
| v | V | v | -vala |
| s | s | s | isisu |
| z | z | z | umzuzu |
| sh | J | S | ishumi |
| h | h | h | -hamba |
| hh | h | $\mathrm{h} \backslash$ | ihhashi |
| 1 | I | 1 | -lala |
| hl | t | K | -hlala |
| dl | 3 | K | idla |
| tsh | t' | tS_> | utshani |
| j | d3 | dz | uju |
| kl | kx ~ kL | kx | umklomelo |
| SEMI-VOWELS |  |  |  |
| y | j | j | uyise |
| w | w | w | wela |
| VOWELS |  |  |  |
| 1 | i | i | -siza |
| u | u | u | umuzi |
| e | e | e | umgibeli (often context conditioned) |
| e | $\varepsilon$ | 3 | -pheka |


| TYPICAL ZULU CORRESPONDENCE | IPA | X-SAMPA | Example |
| :---: | :---: | :---: | :---: |
| o | 0 | $\bigcirc$ | umakoti (often context conditioned) |
| o | $\bigcirc$ | 0 | ogogo |
| a | a | a | -dida |
| CLICKS |  |  |  |
| c | 1 | $1 \backslash$ | icici |
| q | ! | $!\backslash$ | iqaqa |
| x | II | \\| \ \ | ixoxo |
| ch | $1^{\text {b }}$ | $1 \backslash$ h | ukuchaza |
| qh | $!{ }^{\text {h }}$ | ! \_h | iqhude |
| xh | $1{ }^{\text {h }}$ | \\| \ \_h | ukuxhasa |
| gc | ${ }_{\text {q }}{ }^{\text {h }}$ | 9_1 \_t | isigcino |
| gq | 9! ${ }^{\text {f }}$ | g_! \_t | uMgqibelo |
| gx | $\mathrm{q}_{\\|} \mathrm{h}^{\text {¢ }}$ | g_ |  |
|  |  |  |  |
| _t | ukugxoba |  |  |


| OTHER SYMBOLS |  |
| :---: | :---: |
| $"$ | primary stress |
| . | syllable break |
| $\#$ | word boundary |

Most Zulu consonants (including the clicks) can be pre-nasalized. Only aspirated consonants are not able to be pre-nasalized - or rather, aspiration disappears when there is pre-nasalization. There is debate as to whether these sequences should be analyzed as consonant clusters or single pre-nasalized segments and Halpert points to phonetic evidence which shows no significant difference in duration, timing, or syllabification between sequences analyzed as single segments and those considered to be two-segment clusters. ${ }^{21}$ We will adopt the two-segment analysis in our phone chart and pronunciation lexicon and these will be represented as a 'nasal + cons.' sequence, including for clicks.

[^5]Note also that Zulu is a tonal language, although tone does not manifest in the orthography in any way. Due to this fact, and the lack of an agreed standard in many aspects of tone marking, we are not representing tone in the pronunciation lexicon.

### 7.1. List of rare phonemes

None known.

### 7.2. List of foreign phones

/в/ Found in foreign words such as irayisi, 'rice', and mara, 'but'.

## 8. Other language specific items

### 8.1. Table of Digits

|  | Zulu | English-based |
| :--- | :--- | :--- |
| 0 | ize / iqanda | zero |
| 1 | kunye | one |
| 2 | kubili | two |
| 3 | kuthathu | three |
| 4 | kune | four |
| 5 | kuhlanu | five |
| 6 | yisithupa | six |
| 7 | yisikhombisa | seven |
| 8 | yisishiyagalombili | eight |
| 9 | yisishiyagalolunye | nine |

Note that these forms are used when referring to digits in isolated, abstract form. The form of each word will vary when counting different objects and in other grammatical contexts. Also, English words are often used in counting, and particularly for numbers above 5.

### 8.2. Other Numbers

|  | Zulu | English |
| :--- | :--- | :--- |
| 10 | yishumi | ten |
| 100 | ikhulu | hundred |
| 1000 | inkulungwane | thousand |
| 10,000 | izinkulungwane <br> eziyishumi | ten thousand |
| 100,000 | izinkulungwane <br> eziyikhulu | hundred thousand |
| $1,000,000$ | isigidi | ten |
| 10 million | izigidi eziyishumi | hundred |

Most speakers will prefer to use the English words for these larger numbers.

## 9. References

Aitchison, J. \& Harley, A. (2006). South African illiteracy statistics and the case of the magically growing number of literate and ABET learners. Journal of Education, 39, 89-112.

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    ${ }^{5}$ Zulu (2012). Retrieved August 8, 2012, from http://www10.gencat.net/pres_casa_1lengues/AppJava/frontend/llengues_detall.jsp?id=1082\&idioma=5
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    ${ }^{15}$ UCLA Language Materials Project: Zulu (n.d). Retrieved August 8, 2012, from http://lmp.ucla.edu/Profile.aspx?menu=004\&LangID=23

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    ${ }^{19}$ Van Huyssteen, L. (2003). A practical approach to the standardisation and elaboration of Zulu as a technical language. (Unpublished doctoral thesis). University of South Africa, South Africa, p. 91.
    ${ }^{20}$ ibid, p. 62.

[^5]:    ${ }^{21}$ Halpert, C (2012). Overlap-driven consequences of nasal place assimilation. In Philip Hoole, Lasse Bombien, Marianne Pouplier, Christine Mooshammer, Barbara Ku hnert, eds., Consonant clusters and structural complexity. Mouton de Gruyter.

