## Language Specific Peculiarities Document for <br> Dholuo as Spoken in KENYA

## 1. Special handling of dialects

Dholuo belongs to the Luo-Acholi /Western Nilotic group of the Nilo-Saharan language family. It is a non-colonial native language ${ }^{1}$ that is spoken by an estimated four to six million Luo people in central and southern regions of Nyanza Province, in south western Kenya². It is the predominant language of Nyanza province. A further estimated 200,000 people speak Dholuo in Tanzania, near the Kenyan border. Related languages such as Adhola (in Western Uganda) and Alur (D.R. Congo and Uganda) are very close to Dholuo linguistically, and can be regarded as its dialects (Tucker, 1994:12). ${ }^{3}$ The data collection for this database was conducted in Kenya.

There are two main Kenyan Dholuo dialects according to Stafford (1967):

| Dialect | Region |
| :--- | :--- |
| South Nyanza | Southern Nyanza and parts of Central Nyanza <br> not covered by the Trans-Yala dialect. <br> Population centres included are: Kisumu ${ }^{4}$, <br> Migori, Kisii, Nyamira, Homa Bay |
| Trans-Yala | Siaya municipality, Ugenja (total of 70,000 <br> speakers) |

There is no official standard Dholuo dialect, but the South Nyanza variety is used in education, churches, and broadcasting ${ }^{5}$. The South Nyanza and Trans-Yala Dholuo dialects are highly mutually intelligible with only minimal lexical differences.

[^0]Nyanza Province has a total population of approximately 4.3 million (1999 Census). However, there are said to be fewer than 70,000 speakers of the Trans-Yala dialect according to the 1999 census ${ }^{6}$.

It is important to note that Dholuo is a minority language; its speakers are under great social and economic pressure to speak Swahili or English. This has resulted in a substantial amount of lexical borrowing from these languages into Dholuo (Cable, 2009).
Speakers from both dialect groups above are included in this speech database.

## 2. Deviation from native-speaker principle

There is no special deviation from the native-speaker principle for this project. Only native speakers of Dholuo were collected.

## 3. Special handling of spelling

Not applicable.

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

Latin script is used for the orthographic transcription of Dholuo. The Unicode range for Dholuo is U+0027 and U+0041-U+007A.

| Unicode | Dholuo upper case | Unicode | Dholuo lower case |
| :--- | :--- | :--- | :--- |
| 0041 | A | 0061 | a |
| 0042 | B | 0062 | b |
| 0043 | C | 0063 | C |
| 0044 | D | 0064 | d |
| 0045 | E | 0065 | e |
| 0046 | F | 0066 | f |
| 0047 | G | 0067 | g |
| 0048 | H | 0068 | h |
| 0049 | I | 0069 | i |
| 004a | J | $006 a$ | j |
| 004b | K | $006 b$ | k |
| 004c | L | $006 c$ | I |
| 004d | M | $006 d$ | m |

[^1]| Unicode | Dholuo upper case | Unicode | Dholuo lower case |
| :--- | :--- | :--- | :--- |
| 004 e | N | 006 e | n |
| 004 f | O | 006 f | o |
| 0050 | P | 0070 | p |
| 0052 | R | 0072 | r |
| 0053 | S | 0073 | S |
| 0054 | T | 0074 | t |
| 0055 | U | 0075 | U |
| 0057 | W | 0077 | w |
| 0059 | Y | 0079 | Y |
| 0027 | I | 0027 | ' |

Letters that are not used in native Dholuo words but are used in the spelling of foreign names and borrowings are:

| Unicode | Dholuo upper case | Unicode | Dholuo lower case |
| :--- | :--- | :--- | :--- |
| 0051 | Q | 0071 | q |
| 0056 | V | 0076 | V |
| 0058 | X | 0078 | X |
| $005 a$ | $Z$ | $007 a$ | Z |

## 5. Description of Romanization scheme

Not applicable.

## 6. Description of method for word boundary detection

Word boundaries in the orthography are determined by white space.

## 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. There are 35 native segmental phonemes in total. There are 26 consonants ( 2 semi-vowels, 5 prenasalized ${ }^{7}$ obstruents, and 19 other consonants ${ }^{8}$ ) and 9 vowels. In addition, we include symbols for 2

[^2]non-native phones and 6 diphthongs ${ }^{9}$. Dholuo is a tone language; however, tone is not be marked in the lexicon.

## DHOLUO PHONE CHART

| TYPICAL DHOLUO CORRESPONDENCE ${ }^{10}$ | IPA | SAMPA | COMMENTS |
| :---: | :---: | :---: | :---: |
| CONSONANTS |  |  |  |
| p | p | p |  |
| b | b | b |  |
| t | t | t |  |
| d | d | d |  |
| k | k | k |  |
| g | g | g |  |
| ch | c | c |  |
| j | $\dagger$ | ग ${ }^{11}$ |  |
| f | f | f |  |
| th | $\theta$ | T |  |
| dh | б | $\mathrm{D}^{12}$ |  |
| s | s | s |  |
| h | h | h |  |
| m | m | m |  |
| mb | mb | m_b |  |
| nd | nd | n_d |  |

${ }^{9}$ There are other diphthongs in Dholuo, but these can all be represented by vowel-glide or glide-vowel sequences separated by whitespace. The six forms in the table have been identified as requiring dedicated symbols because both vowels carry similar weight (Borowsky et al., 2009: 173-174), and two vowels cannot appear in the same syllable separated by whitespace.
${ }^{10}$ Tucker (1994), Cable (2009), Okoth-Okombo (1982), and Ngala (1994).
${ }^{11}$ There are differences in opinion in the literature about the manner of articulation of the <ch> and <j>. Some consider them to be stops and others as affricates (see Okoth-Okombo, 1982; Tucker, 1994; Cable 2009). We represent them as plosives to maintain symmetry with the pre-nasalised series.
${ }^{12}[T]$ and [D] can also have affricate realizations; [tT] and [dD]. We use [T] and [D] for simplicity.

| TYPICAL DHOLUO CORRESPONDENCE ${ }^{10}$ | IPA | SAMPA | COMMENTS |
| :---: | :---: | :---: | :---: |
| ndh | n | n_D |  |
| ng | ワg | N_g |  |
| $n \mathrm{ng}^{\prime}$ | $\eta$ | N |  |
| n | n | n |  |
| nj | nf | J_J |  |
| ny | n | J |  |
| I | I | I |  |
| $r$ | $r$ | $r$ |  |
| w | w | w |  |
| y | j | j |  |
| VOWELS |  |  |  |
| $a^{13}$ | a | a | +ATR |
| e | e | e | +ATR |
|  | e | E | -ATR |
| i | i | i | +ATR |
|  | i | I | -ATR |
| 0 | $\bigcirc$ | 0 | +ATR |
|  | $\bigcirc$ | 0 | -ATR |
| u | U | u | +ATR |
|  | u | U | -ATR |
| DIPHTHONGS |  |  |  |
| ie | ie | ie | +ATR |
| ia | ia | ia | +ATR |

${ }^{13}$ ATR: advanced tongue root. Older analyses of Dholuo include +/-ATR contrast for /a/ (Okoth-Okombo, 1982; Tucker, 1994). However, this distinction appears to be no longer salient for most speakers (Borowsky et al., 2009). We therefore do not to include this distinction for /a/.

| TYPICAL DHOLUO CORRESPONDENCE ${ }^{10}$ | IPA | SAMPA | COMMENTS |
| :---: | :---: | :---: | :---: |
| uo | U0才 | uo | +ATR |
| ue | ued | ue | +ATR |
| ui | uí | ui | +ATR |
| ua | uą | ua | +ATR |
| FOREIGN PHONES |  |  |  |
| v | v | v |  |
| z | z | z |  |

## Notes:

1. Voiceless oral obstruents / $\mathrm{p}, \mathrm{T}, \mathrm{t}, \mathrm{tS}, \mathrm{k} /$ can be pronounced with aspiration word-initially and some speakers pronounce them ejectively word-finally (Tucker, 1994).
2. Dholuo makes a distinction between vowels that are +/- ATR (advanced tongue root). All the vowels in a word must have the same ATR value. We use the tense/close and lax/open vowel symbols to represent the +ATR and -ATR vowels respectively in SAMPA.

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

### 7.1. List of rare phonemes

The phones in the following table are rare.

| TYPICAL DHOLUO <br> CORRESPONDENCE | IPA | SAMPA | COMMENTS |
| :---: | :---: | :---: | :--- |
| ndh | n_б | n_D | Rare |
| ua | ua | ưa $_{\text {ua }}$ | Rare |
| ui | ui | uị $_{\substack{i}}$ | Very rare |

### 7.2. List of foreign phones

Foreign phones tend to be mapped onto corresponding native Dholuo forms. For example, the voiceless palato-alveolar fricative /J/ in a word like "shilling" (English) and "shilingi"
(Swahili) is substituted with /s/: 'siling'. The only foreign phones used in this database are /v/ and /z/.

## 8. Other Language Items

### 8.1 Table of Digits

| Numeral | DHOLUO |
| :---: | :--- |
| 0 | nono |
| 1 | achiel |
| 2 | ariyo |
| 3 | adek |
| 4 | ang'wen |
| 5 | abich |
| 6 | auchiel |
| 7 | abiriyo |
| 8 | aboro |
| 9 | ochiko |

### 8.2 Other Numbers

| Numeral | DHOLUO | Comment |
| :--- | :--- | :--- |
| 10 | apar |  |
| 100 | haga achiel |  |
|  | mia achiel | Arabic via Swahili <br> (mi'a/mia) |
|  | gana achiel |  |
|  | alufu achiel | Arabic via Swahili <br> (alf/aluf) |
| 10,000 | gana apar |  |
|  | alufu apar | Arabic via Swahili <br> (alf/aluf) |
| 100,000 | gana haga achiel |  |
|  | alufu mia achiel |  |
| $1,000,000$ | tara achiel |  |
| 10 million | milion achiel | English (million) |
|  | tara apar |  |
|  | milion apar | English (million) |

8.3 Spelling Alphabet

| Orthography | Usual pronunciation (SAMPA) |
| :---: | :---: |
| a | e |
| b | bi |
| c | si |
| d | di |
| e | i |
| f | Ef |
| g | ग ${ }^{\text {i }}$ |
| h | h Ec |
| i | aj |
| j | $J \mathrm{Ej}$ |
| k | kEj |
| I | EI |
| m | E m |
| n | En |
| o | - |
| p | pi |
| r | ar |
| s | Es |
| t | ti |
| u | ju |
| w | da.bli.ju |
| y | waj |
| Foreign letters | Usual pronunciation (SAMPA) |
| q | kju |
| $v$ | vi |
| x | Eks |
| z | z Ed |

## 9. References

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[^3]Wells, J. 2000, May $3^{\text {rd }}$. Computer-coding the IPA: a proposed extension of SAMPA. http://www.phon.ucl.ac.uk/home/sampa/x-sampa.htm, retrieved July 8 ${ }^{\text {th }}, 2014$.


[^0]:    ${ }^{1}$ The three most widely spoken non-colonial native languages in Kenya are Kikuyu, Dholuo, and Luhya (http://www.kenya-information-guide.com/kenya-language.html).
    ${ }^{2}$ Wikipedia mentions six million people but this is possibly inclusive of all speakers inside and outside of Kenya (http://en.wikipedia.org/wiki/Luo dialect). Ethnologue has the more conservative estimate of 4-4.8 million (http://www.ethnologue.com/language/luo). Dholuo is one of 69 languages spoken in Kenya, and it has no official status (http://en.wikipedia.org/wiki/Languages of Kenya).
    ${ }^{3}$ Alternate names for this language as reported by the Ethnologue are Kavirondo Luo, Luo, and Nilotic Kavirondo. The term "Luo" is also used as the name of a sub-language group under the Nilo Saharan language family, as well as to refer to the ethnic group (also called Joluo, singular Jaluo) in Kenya, Tanzania, Sudan and Uganda. Tucker notes that the name "Luo" is also spelled "Lwo", "Lwoo", and "Luo" and is used as a tribal name or ancestral name (Tucker, 1994: 11).
    ${ }^{4}$ Kisumu is the capital of Nyanza province. It is the third largest city in Kenya.
    ${ }^{5}$ According to Wikipedia, Dholuo is used in broadcasts such as on KBC (Kenya Broadcasting Corporation), Radio Ramogi, and Radio Lake Victoria.

[^1]:    ${ }^{6}$ The 1999 census is mentioned in these references: https://en.wikipedia.org/wiki/Nyanza Province and https://en.wikipedia.org/wiki/Siaya County. The census can be found here:
    http://statistics.knbs.or.ke/nada/index.php/catalog/56

[^2]:    ${ }^{7}$ Prenasalized consonants are a single unit phoneme in Dholuo (Ngala, 1994). These complex phonemes are not a sequence of consonant cluster of a nasal + obstruent.
    ${ }^{8}$ Although a glottal stop is reported to occur in a handful of words such as 'yes' and 'no' (Okoth-Okombo, 1982), its phonemic status is doubtful. We therefore do not to include the glottal stop in the phonemic inventory.

[^3]:    ${ }^{14}$ n.d. stands for no date.

