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The Sandawe language is spoken in the Kondoa district of central Tanzania by approximately 40,000 people. Sandawe has been widely assumed to be a member of the Khoisan language family, but recent research has cast doubt on the position that such a family exists (Güldemann & Vossen 2000). The Sandawe language can be divided into an eastern variety and a western variety. The differences between these two varieties are slight and gradual. The orthography used in the following description was decided upon in 2002 by a group of Sandawe speakers representing different parts of the language area. Early research on Sandawe phonetics and phonology was undertaken by Dempwolff (1916) and Copland (1938). More recent studies are found in Tucker & Bryan (1977), Elderkin (1989, 1992), Wright, Maddieson, Ladefoged & Sands (1995), Maddieson, Ladefoged & Sands (1999) and Hunziker, Hunziker & Eaton (2005).

The word lists and text provided with this paper were read by a forty-year-old male native speaker of the western dialect of Sandawe. The text ‘The North Wind and the Sun’ was translated by the same speaker from a Swahili version provided by Olle Engstrand of Stockholm University.

Consonants

Pulmonic and glottalic:

	Bilabial	Labio-dental	Alveolar (apical)	Alveolar lateral (laminal)	Post-alveolar	Velar/uvular	Labial-velar	Glottal
Plosive	p p ^h b		t t ^h d			k k ^h g		ʔ
Affricate				tɬ dʒ	tʃ tʃ ^h dʒ			
Ejective			tsʼ	tɬʼ		kʼ		
Nasal	m		n					
Tap			r					
Fricative		f	s	ɬ		χ		h
Approximant				l	j		w	

Velaric:

	Dental	Post-alveolar (apical)	Lateral (laminal)
Voiceless unaspirated	l	!	
Voiceless aspirated	l ^h	! ^h	^h
Voiced	ɟl	ɟ!	ɟ
Voiced nasalized	ɲl	ɲ!	ɲ
(Post)glottalized	lʔ	!ʔ	ʔ

p	pá:ŋkí	<i>bpaangki</i>	‘light’
p ^h	p ^h ándé	<i>pande</i>	‘split’
b	bàʔé	<i>baʔe</i>	‘be big’
m	màʔé	<i>maʔe</i>	‘go around’
f	fàré	<i>fare</i>	‘lie’
w	wàdé	<i>wade</i>	‘friend (female)’
t	tǎ:	<i>dtaa</i>	‘untie’
t ^h	t ^h â	<i>ta</i>	‘run (sg.subj.)’
d	dǎ:	<i>daa</i>	‘be able to’
tsʔ	tsʔâ	<i>tsʔa</i>	‘water’
n	náʔ	<i>naʔ</i>	‘shine’
s	sáná	<i>sana</i>	‘beeswax’
r	rát ^h à	<i>rata</i>	‘tree (type)’
tl	tlâ	<i>tla</i>	‘door’
dʒ	dʒàní	<i>dlani</i>	‘arrow’
tlʔ	tlʔǎ:	<i>tlʔaa</i>	‘take (pl.obj.)’
ʔ	ʔǎ:	<i>lhaa</i>	‘goat’
l	lá:ʔé	<i>laaʔe</i>	‘hare’
tʃ	tʃí	<i>tci</i>	‘I’
tʃ ^h	tʃ ^h í:	<i>tchii</i>	‘mushroom (type)’
dʒ	dʒí:ʔ	<i>dziiʔ</i>	‘eagle (type)’
j	jàʔbé	<i>yaʔbe</i>	‘work’
k	kǎ:	<i>gkaa</i>	‘put (pl.obj.)’
k ^h	k ^h ǎ:	<i>kaa</i>	‘strike’
g	gáwâ	<i>gawa</i>	‘hill’
kʔ	kʔámé	<i>kʔame</i>	‘beer’
χ	χâ	<i>kha</i>	‘be bad’
h	hàwé	<i>hawe</i>	‘collect water’
ʔ	ʔànt ^h á	<i>anta</i>	‘honey gourd’
l	lí	<i>ci</i>	‘come (sg.subj.)’
l ^h	l ^h í	<i>chi</i>	‘delay’
ɟl	ɟí:ɟí:	<i>gcĩcoo</i>	‘finch (type)’
ɲl	ɲí:	<i>ncĩ</i>	‘meat’
lʔ	lʔí:	<i>cʔĩ</i>	‘snake’

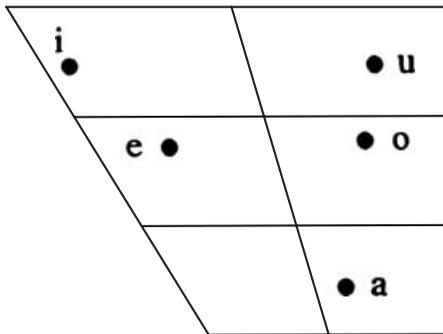
!	!ě:	<i>qě</i>	‘rib’
! ^h	! ^h ê:	<i>qhě</i>	‘tongue’
9!	9!òk ^h ómí	<i>gqokomi</i>	‘greater kudu’
n!	n!ě:	<i>nqee</i>	‘laugh’
!’	!’ě:	<i>q’ee</i>	‘ant hill dirt’
	ǒ:	<i>xoo</i>	‘path’
^h	^h ô:	<i>xhō</i>	‘hollow’
9	9 ǒ:9 ê	<i>gxôgxe</i>	‘greater kudu (male)’
n	n ǒ:	<i>nxoo</i>	‘child’
’	’ǒ:	<i>x’oo</i>	‘harvest’

The phonemes /tʃ/, /dʒ/, /t/ and /f/ occur rarely. In the eastern dialect, /tʃ/ may be fronted to /ts/ and /dʒ/ may be fronted to /dz/ or weakened to /z/. All plosives, fricatives and clicks, excepting the labials, /ʔ/, /h/, /d/ and /dʒ/, may be labial-velarized.

Clicks occur both word-initially and word-medially. Examples of word-medial clicks include [má:’â] ‘louse’, [k’áⁿ!á] ‘to lose’ and [ʔú^hû] ‘to cough’. Word-medial clicks are more likely to be glottalized clicks than clicks of other types.

Voiced clicks are rare. Eight examples have been attested in a database of approximately 2000 words. The post-alveolar clicks may be produced with an accompanying tongue slap, in which the tongue hits the floor of the mouth after the release of the closure.

Vowels



i	îné	<i>dtine</i>	‘trap’
e	tê	<i>dte</i>	‘other’
a	táné	<i>dtane</i>	‘pull’
u	tû	<i>dtu</i>	‘come out’
o	tónó	<i>dtono</i>	‘back of head’
i:	tĩ:gâ	<i>dtiiga</i>	‘leftovers’
e:	té:	<i>dtee</i>	‘count’
a:	tǎ:	<i>dtaa</i>	‘untie’
u:	tũ:mbé:	<i>dtuumbee</i>	‘tree (type)’
o:	t ^h ǒ:	<i>too</i>	‘jump’

ĩ:	dĩ:	dĩ	‘stone’
ẽ:	dẽ:	dẽ	‘mark’
ã:	tʃ ^h ã:	tchã	‘fat’
ũ:	t ^h ũ:	tũ	‘darkness’
õ:	dõ:	dõ	‘tree (type)’
ĩ	õ:χĩ	xookhi	‘still; not yet’
u	dèrũ	deru	‘chin’

Long oral vowels are approximately 1.5 times as long as short oral vowels. Nasal vowels are slightly shorter than long oral vowels. There is no contrastive length difference in nasal vowels. Long vowels, both oral and nasal, may be shortened before a glottal stop. An oral vowel followed by a glottalized click is usually nasalized as producing the click involves lowering of the velum, as well as constricting the larynx. Nasalization in nasal vowels tends to begin part-way through the vowel and become stronger towards the end. Sometimes a word-final nasal vowel is heard with a following velar nasal [ŋ].

Low toned high vowels in word-final position are realized as voiceless vowels, except where they follow consonant clusters, as in [hùmbù] ‘cow’. Their realization is variable, ranging from barely audible (particularly with speakers of the Western dialect) to weakly voiced. Other non-phonemic voiceless vowel qualities are sometimes heard after a glottal stop, where they take the quality of the preceding vowel.

Tones

Sandawe has two underlying tone levels: high, /^h/, and low, /^l/ . A surface mid tone [˥] is analyzed as a downstepped high. High and low tones occur on both short and long vowels, although low-toned long vowels are rare. Rising tones (on long vowels only) and falling tones (on short and long vowels) occur and are analyzed as sequences of level tones. Word-final low tones fall slightly.

H	sáná	sana	‘beeswax’
H	tʃ ^h á:	tchaa	‘cooking pot’
L	k ^{hw} à	kwa	‘return’
L	dò:	dõ	‘tree (type)’
LH	tʃ ^h ǎ:	tchaa	‘tears’
HL	t ^h â	ta	‘run (sg.subj.)’
HL	tʃ ^h â:	tchã	‘fat’

Rightward tone spread occurs in non-word-final morae. Thus, an L tone is realized as an HL tone when it follows an H tone, so that an underlying H–H–L sequence is realized as H–H–HL, as in [t^himé-sâ] ‘cook-3f.sg.PC’.¹ In the same way, an H tone on a long vowel is realized as an LH tone when it follows an L tone, as in [hùmbù-ǎ:] ‘cow-SF’, which has the underlying tone sequence L–L–H. High tone spread applies across syllable boundaries in monomorphemic words as well as multimorphemic words, but low tone spread applies across syllable boundaries in multimorphemic words only.

The association of tones to words of differing syllabic patterns is not predictable, but there is a strong tendency for the H tone to be carried on more syllables than the L tone, leaving the L tone(s) associated to the syllables at the word boundaries. Thus the underlying

¹ See the list of abbreviations towards the end of the paper.

tone sequences H–L, as in [gáwâ] ‘hill’, and L–H–H, as in [tí’ábísó] ‘stomach’, are more common than HL–L, as in [tátà] ‘tip, point’, and L–L–H, as in [kèlèmbá] ‘skin’.

Under certain conditions, the tone patterns of words may undergo a process in which all tones are realized as L tones. Evidence of the original tone pattern is found in the tone of the final syllable, which is low and level if it is an H tone at the underlying level and low and falling if it is an L tone at the underlying level. Subject to specific restrictions, this process applies to the head in a genitive construction, a noun following a coordinating conjunction and an adjective in an NP. The same tone-lowering process commonly applies to verbs, depending on mood, information structure and constituent order.

Transcription of recorded passage

In the following text, the word-final occurrences of /ʔ/ in /sàmbòsʔ:/, /ts'ékénàsàʔ:/ and /bàʔétʰēʔ:/ are reductions of the postposition /-ts'ɨ/.

wék^hé: nì: ||'ákásu ʔútā: ʔà: k^hòŋgòmàwā:ki | kàʔ hò sàmbòsē: wáʔmé: sàmbò:ʔ
 l'ùsùkùsē: || ts'ékénàsàʔ: pà: mĩ:ndzò ʔlèmèsè:à: l'ùsùku | k^hót^hà híl'ā: ||
 k^héʔék^wā:kiʔà kàʔ | bā:ī:ā: mĩ:ndzò ʔlèmèsè:ll'āʔ k^hót^h túk^wè:ts'èsè: | hèwé sàmbòsē:
 || wék^hē: pà: bā:ī:ā: wék^héʔò:gà | p^hákā hèwé sàmbò tʰè:kiʔò:nà: || pà: híā ʔúrí:gā
 wèk^hē:gìʔ | pà: mĩ:ndzò ʔlèmèsè:kià: | hèwé k^hót^hī:gà tétā: ʔl'āʔàkà: || p^hákā
 tʰè:kiʔò:nà | wék^hē: pà: ||'áʔ ||'ákásū:su sà: tétāsà híl'íʔí:sà nàʔ || sā: ʔúrí:
 bàʔétʰēʔ: | mĩ:ndzò ʔlèmèsè: | pà: hèwé k^hót^hī:gà tük^wè: || nì: hèwémē: | wék^hē: pà:
 mē:nā: kiàkàʔ | ||'ákásū:su sàmbòsusu hèwé ʔò:tʰè ||

Orthographic version

Wekē nī x'agkasu udtaa aa kongomawāgki, gka' ho sambosē wa'mee-sambōts'i c'usugkusē. Ts'ekhenasāts'i bpaā miindzo-ncemeseēaa c'usugku, kotia hic'ā.

Ke'egkwāgki'a gka', baaraā miindzo-ncemeseēx'a' koti dtugkweets'esē, hewe sambosē.

Wekē bpaā baaraa wekē'ōga, pagka hewe-sambo-tcheegki'ōnaa. Bpaā hia urīga wekēgi', bpaā miindzo-ncemeseēgkiaa, hewe-kotīga dtelhaa nqa'agkaa. Pagka tcheegki'ōna, wekē bpaā x'a'. X'agkasūsu saa dtelhasa hix'ī'īsa na'. Saā urī ba'etcheets'i, miindzo-ncemeseē, bpaā hewe-kotīga dtugkwee. Nī hewemee, wekē bpaā meena gkiagka', x'agkasūsu sambosusu hewe ōtce.

Interlinearized version

<i>Wekē nī</i>	<i>x'agkasu</i>	<i>udtaa</i>	<i>aa</i>	<i>kongomawāgki,</i>	<i>gka'</i>	<i>ho</i>
wekē nī	x'agkasu	udtaa	aa	kongoma-wa~gki	gka'	ho
wind and sun	long.ago	NC3PL	argue-MULT-RECIP	HSY	who	

<i>sambosē</i>	<i>wa'mee-sambōts'i</i>	<i>c'usugkusē.</i>
sambo-si-e~	wa'mee-sambo~-ts'i	c'usugku-si-e~
strength-POSS-3MSG-SP	[companion-strength] _{GEN-SP- POST(at)}	surpass-POSS-3MSG-SP

bpaa hewe-kotĩga dtugkwee.
bpaa hewe-koti-~a dtu-gku-ee
 NC3MSG [he-coat]_{GEN}-SP-3MSG.PC come.out-CAUS-3MSG.OBJ

Nĩ hewemee,
nĩ hewe-mee
 and DEM(REF.3MSG)-POST(because)

wekẽ bpaa meenaa gkiagka',
wekẽ-~ bpaa meena-e gki-a-gka'
 wind-SP NC3MSG agree-3MSG.OBJ ADD-3MSG.PC-HSY

x'agkasũsu sambosusu hewe õtce.
x'agkasu-~su sambo-su-su hewe õtce
 sun-SP-3FSG strength-POSS-3FSG he compared.to

Abbreviations

ADD	Additive	OBJ	Object
APPL	Applicative	PC	Pronominal Clitic
BEN	Benefactive	POSS	Possessive
CAUS	Causative	POST	Postposition
COM	Comitative	RECIP	Reciprocal
CN	Connective	REF	Referential
DEM	Demonstrative	SC	Subordinate Clause
[] _{GEN}	Genitive	SF	Subject Focus
HSY	Hearsay	SP	Specific
MULT	Multiple	VERB	Verbalizer
NC	Narrative Conjunction	3FSG	Third person feminine singular
NEG	Negative	3MSG	Third person masculine singular
NML	Nominalizer	3PL	Third person plural

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