

Organised Phonology Data

Adzera (Atzera, Azera, Atsera, Acira) Language [AZR] Morobe Province, Papua New Guinea

Western Melanesian Oceanic; North New Guinea Cluster; Huon Gulf Chain; Markham Family

Population census: 30,000

Major villages: Afiang, Anga', Antir, Antiragin, Atsunas, Awan, Bamping'yafan, Binimamp, Dantap, Dziyats, Dzumanggurun, Dzumra', Gantisap, Guruf, Idzingants, Intsi, Intuap, Iringin, Itsir, Madzam, Mamingan, Mampim, Mangiang, Marafau, Marangints, Marasasa, Marawasa', Mitsing, Muyagudzun, Ngarutumua, Ngaruwain, Ngaruwapum, Onga', Puguap, Ragiampun, Ragidumpiat, Ragigumpuan, Ragitamut, Riara, Samaran, Sauf, Sauruan, Sifu, Singas, Siruwarang', Ufuafragin, Umi Tent City, Urai, Wafibampun, Wampua, Wankung, Waridzian, Yampua', Yanuf, Yatsing', Zumim

Linguistic work done by: Rev. Fritz Oertel; Dr. Otto Dempwolff, University of Hamburg; Rev. K.G. Holzknrecht; Suzanne Holzknrecht, Australian National University; Morris Johnson, SIL; David Howard, SIL. (The original version of this OPD was written in 1997 by Morris Johnson based on work done 1995-1999; the current revisions were made by David Howard based on work done 1999-2003.)

Data checked by: David Howard 2003

Phonemic and Orthographic Inventory

a b d dʒ f g h i k m ^mp n ⁿt ⁿtʃ ŋ ^ɰk ^ʔ? p r s t tʃ u
 a b d dz f g h i k m mp n nt nts ŋ ŋk ŋ' p r s t ts u
 A B D Dz F G H I K M Mp N Nt Nts ŋ ŋk P R S T Ts U

w j ?

w y '

W Y

Consonants

	Bilab	LabDen	Dental	Alveo	Postalv	Retro	Palatal	Velar	Uvular	Pharyn	Glottal
Plosive	p b		t d					k g			ʔ
Nasal	m		n					ŋ			
Trill											
Tap/Flap			r								
Fricative		f		s							h
Lateral Fricative											
Approx							j				
Lateral Approx											
Ejective Stop											
Implos											

^mp/ prenasalised voiceless bilabial plosive

ⁿt/ prenasalised voiceless alveolar plosive

/tʃ/	voiceless affricated post-alveolar plosive
/dʒ/	voiced affricated post-alveolar plosive
/ ^h tʃ/	prenasalised voiceless affricated post-alveolar plosive
/ ^h k/	prenasalised voiceless velar plosive
/ ^h ʔ/	prenasalised voiceless glottal plosive
/w/	voiced labio-velar approximant

p	puatsi	'kunai grass'	t	tauf	'stone'
	kupis	'reveal'		atup	'jump'
	ampap	'border'		afat	'handle'
	ipruts	'jump/spring'		trasan	'be tough'
b	bump	'valley'	d	da	'and'
	ibaj	'trough'		madamin	'oil'
	asub	'error'		--	
	braj	'split open'		drujan	'be lush'
^m p	mpui	'water'	tʃ	tsaf	'praise'
	ampan	'people'		bitsinta	'one'
	gamp	'place'		antsuts	'youth'
	mpru'	'gather'		tsritsru'	'dew from trees above'
m	mama'	'child'	dʒ	dzaf	'fire'
	ima'	'no'		idzuai	'what'
	ukam	'moon'		fagamudz	'warrior' (Amari dialect)
	mra'	'loose soil'		dzra'	'upstream'
f	fufun	'hair'	^h t	ntaj	'spear (v)'
	ifab	'pig'		bintip	'stool'
	dzaf	'fire'		ayant	'aibika greens'
	fripan	'to jerk'		ntruḡ	'stare'
w	was	'lime'	^h tʃ	ntsupan	'to finish'
	bawa'	'arrive'		intsij	'crawled'
	--			ḡants	'shield'
	--			ntsru'an	'to abort a pregnancy'
			n	nafun	'(his) sister'
				bini	'good'
				ampan	'people'

--			ʰk	ŋkian	'be bitter'
				dzaŋkum	'corn'
r	ramaŋ'	'my father'		minuŋk	'tree sp.'
	irim	'gave'		ŋkrafan	'snore'
	gur	'clay pot'			
--			ŋ	ŋuntuŋ	'sky'
				giŋit	'nest'
s	santan	'all'		tiriaŋ	'platform'
	busir	'pigeon'		ŋru'ŋru'	'uneven'
	mais	'bad'			
	sru'an	'know'	ʔ	--	
				wa'an	'arrive'
j	yafas	'fish'		ima'	'no'
	ayant	'aibika greens'		--	
	--				
	--		ʰʔ	--	
k	kakar	'write'		miŋ'an	'to be'
	ukam	'moon'		ntiaŋ'	'fence'
	kuarak	'gazebo'		--	
	krudan	'to take down' (Onga' dialect)	h	hai	'yes'
				--	
g	ga	'eat'		--	
	igat	'root'		--	
	--			--	
	gru'an	'remove'			

Vowels

i		u			
		a			
i	intap	'ground'	a	afat	'handle'
	tsim	'betel nut'		yafas	'fish'
	mamafi	'ghost/troll'		iba	'go'
	ibia'	'come toward'		--	
	mpui	'water'		miamun	'first'

u	umant	'taro'
	bump	'valley'
	isu	'became'
	puatsi	'kunai grass'
	miu	'snake'

Diphthongs

/ai/

/au/

ai	ais	'rib of coconut frond'	au	tauf	'stone'
	wain	'cause'		sau	'search for'
	mamai	'mountain'			

While low vowels followed by high vowels form diphthongs (which are considered a single vowel/complex nucleus of a single syllable), high vowels followed by any other vowels form VV sequences that consist of two syllables, e.g. mpu.i 'water', mi.u 'snake', mi.a.mun 'first', i.ru.a' 'fell'.

Suprasegmentals (tone, stress, length)

Stress is not phonemic. It occurs on the first syllable of two syllable words. On words with more than two syllables a secondary stress occurs on each odd-numbered syllable (Holzknecht 1986:94).

['mama']	'child'
['raŋa,raŋ]	'cold'
['ŋaru,bini]	'good'

Adzera is not a tonal language, so lexical meaning is not affected by tone or intonation. However, intonation is used to express interrogatives and other moods.

Length is not phonemic. Sometimes one vowel follows another across a morpheme boundary, creating a lengthened syllable. However, often one vowel is just absorbed by the other, so the hearer would not detect a lengthened vowel. Stressed syllables tend to be slightly longer in duration than unstressed syllables.

Syllable Patterns

V	a.ni 'here'	pu.a.tsi 'kunai grass'	mpu.i 'water'
VC	uŋ.gan 'his inner thoughts'	ru.a'.an 'to fall'	ŋki.aŋ 'be bitter'
CV	ka.kar 'write'	bi.tsi.nta 'one'	bi.ni 'good'
CVC	naŋ.gan 'thing-3poss'	mi.min.dan 'to be dark'	a.mpap 'boundary'
CCV	gru.dan 'to take down'	triŋ.tri.ŋan 'to be totally dark'	i.bru 'smolder'
CCVC	ŋru'.ŋru' 'uneven'	bra.bru'.an 'be crazy'	i.mpru' 'be with'

The word-initial VC example word-initial and word-medial examples of the CVC pattern do not contain prenasalised stops. Rather there are morpheme breaks between the nasals and the stops which follow them: *uŋ* ‘inner thoughts’ + *gan* ‘third person possessive’ = *uŋ-gan* ‘inner.thoughts-3poss’; *nam* ‘thing’ + *gan* ‘third person possessive’ = *naŋ-gan* ‘thing-3poss’ (see note on nasal assimilation below); and *mimin* ‘be dark’ + *dan* ‘nominalizer/participle’ = *mimin-dan* ‘to be dark/darkness’. Since these are not instances of prenasalisation, the syllable boundaries must fall between the nasals and the stops to avoid unacceptable consonant clusters within a syllable (see below). The word-medial examples for VC and CCVC syllables divide the second and third syllable after the glottal stops because /ʔ/ and /^hʔ/ are not acceptable syllable onsets in Adzera. The word-medial CCV example consists of a reduplicated stem *triŋtriŋ* plus the nominalizer/participle suffix *-an* to form *triŋtriŋan*. In this word the second /ŋ/ is included in the last syllable rather than the middle syllable, because /ŋ/ makes a good onset for the last syllable.

According to Holzknrecht (1986), the second consonant in a cluster can only be /t/ and the first can be any consonant except /ʔ/, /^hʔ/, /^hdʒ/¹, /n/, /w/, or /j/. As seen in the syllable patterns above, other combinations of CC can occur across syllable boundaries only as a result of reduplication, e.g. *taptap* ‘continuous’, or joining of morphemes, e.g. *mimin-dan* ‘to be dark/darkness’. This rule does not necessarily apply to borrowed words; for example, the word /stokijat/ ‘stockyard’ in the recorded story below contains an illegal consonant cluster /st/, which is acceptable in both Tok Pisin and English.

Conventions: Phonological

/r/: This phoneme has been described as a voiced alveolar rolled vibrant in Holzknrecht (1973a) and as a voiced alveolar flap in Holzknrecht (1986). In the dialect area where the authors work, it is pronounced as the latter.

/u/: In Holzknrecht (1973a) an additional vowel phoneme /o/ is given, originally one of the three vowels (/a, i, o/) posited by his predecessor, Rev. F. Oertel. However, as with Holzknrecht (1986), we have found that the literate Adzera speakers we work with do not distinguish between [u] and [o] (which occurs rarely), and, in fact, will only write native Adzera words using <u>. Presently [o] shall be considered an allophone of /u/.

/tʃ/, /^htʃ/: These phonemes are sometimes pronounced [ts] and [ʰts] respectively, especially when in the syllable-final position. Thus, [ts] will be considered an allophone of /tʃ/, and [ʰts] an allophone of /^htʃ/.

/m/, /n/, /ŋ/: When morphemes are joined, all nasals preceding [g] assimilate to the velar point of articulation, [ŋ]. So not only does /nam/ ‘thing’ plus /gan/ ‘3-pers-poss’ become [naŋgan] ‘his/her/their thing(s)’, but /nan/ ‘words/speech’ plus /gan/ ‘3-pers-poss’ also becomes [naŋgan] ‘his/her/their speech’, making the word ambiguous apart from context.

¹ The existence of the phoneme /^hdʒ/, posited by Holzknrecht (1973a) and included in the original version of this OPD, is questionable. The native Adzera speakers who checked this could find no true examples of such a phoneme, and based on phonological symmetry, one would not expect to find this phoneme, since no other voiced plosives are prenasalised. Holzknrecht (1973a) also posited the phonemes /^mb/, /ⁿd/, and /^hg/, but the few examples he used to support the existence of these phonemes either had morpheme breaks between the nasal and the stop (as above), were voiceless in the speech of the native speakers who checked the data, or were unknown. Since no clear examples could be found, these phonemes are not included in this analysis.

^mp/, ⁿt/, ⁿtʃ/, ^ɲk/: Prenasalised plosives tend to lose their nasalisation when they occur word initially or after consonants, e.g. [puwisasus] <mpui isasus> ‘the water is hot’; [wajiʔpuwi] <wayi’ mpui> ‘bathe-IMP’; cf. [wafamʔpuwi] <wafa mpui> ‘go to the river’.

/h/: Today this phoneme is only found in one word, hai ‘yes’. It is possibly borrowed from another language or is a vestige of an earlier stage of the language.

Conventions: Orthographic

The graphemes <j> and <z> are currently used only in loan words and a few proper names, e.g. Jisu; Zumim. However, current orthographic conventions are being reexamined and community input is being sought. Some prefer <z> rather than <dz> for the phoneme /dʒ/. These days many people are used to writing Tok Pisin and, to a lesser extent, English, and so they are familiar with the use of <ng> to represent /ŋ/. This grapheme may need to be used in the future, as it appears that some of the younger people find <ŋ> confusing. Already, because of the influence of English and Tok Pisin, many people use <ng>, especially for the names of people and places. However the new vernacular elementary schools are currently using <ŋ>, so it should become more familiar.

The grapheme <o> is used only in loan words, foreign names, and as an interjection, e.g. Josef; O, Salomon!

Transcription of a recorded passage

gubuʔ maŋan | da mamaʔ rini faʔ iruʔ wa^mpua | ifa i naŋa gum B.G.D
 || ifawaʔ sib da bu^mpum iju iruʔ araŋan biŋaŋ gan da ifab i gum || fain ifa idzibida banis makau | da fain
 ifa itsutsagin ataŋʔa stokijat || inaŋ gum sib | da gubuʔ wasaʔ | da tuasaŋan ifa i^mpruʔ maran | iga
 was || da mamaʔ iyab i ba^mpiŋ || idauman i^mpa waraŋʔ da inuʔ iyab ifan da ini da Gaŋu || wataniŋ wafa n
 abi dzraʔ da watsaŋan || duguⁿt pas imami i wada agi ga^mpaʔ? | ma imaʔ || gaŋu itaniŋ | da itsaŋa dzaf
 duguⁿt wada wa^mpua || da inuʔ | ini binaʔ || o salomon || ramaʔ? ruas ifaŋa dzaf aru gum ^mpui riŋa^mpa ŋ
 asaguari ugu wa || ini sib | da iraŋ ba^mpiŋ waguʔ? ||

Gubuʔ maŋan, da mamaʔ rini faʔ iruʔ Wampua ifa i naŋa gum B.G.D. Ifawaʔ sib da bumpum
 iju iruʔ araŋan biŋaŋ gan da ifab i gum. Fain ifa i dzibida banis makau da fain ifa i
 tsutsagin ataŋʔa stokiyat. Inaŋ gum sib, da gubuʔ wasaʔ, da tuasaŋan ifa im^mpruʔ maran iga
 was. Da mamaʔ iyab i bampiŋʔ. Idauman im^mpa waraŋʔ da inuʔ iyab ifan da ini da Gaŋu,
 “Wataniŋʔ wafa nabi dzraʔ da watsaŋan. Dugunt pas imami i wada agi gampaŋʔ ma imaʔ.”
 Gaŋu itaniŋʔ da itsaŋa dzaf dugunt wada Wampua. Da inuʔ ini binaʔ, “O Salomon, ramaŋʔ
 ruas ifaŋa dzaf aru gum mpui riŋampa ŋasaguari ugu wa.” Ini sib, da iraŋ bampiŋʔ waguŋʔ.

One day, some young men from Wampua went down to work for B.G.D. They arrived, and a white man took down their names and assigned them to work. Some went to herd cattle in the field and some went to drive those entering the stockyard. After they had worked a while in the middle of the day they went and sat together and chewed betel nut. One climbed a coconut palm. Idauman was down below and he called up and said to Gangu, “Turn around and look upstream. Is there a little smoke coming from our village, or not?” Gangu turned and he saw smoke coming from Wampua, and he called out, “Oh, Salomon, our fathers are burning the grass where our garden is along the bank of the Ngasaguari River.” When he had spoken, he cried up there in the coconut.

Bibliography

Holzkecht, K. G.

1973a The phonemes of the Adzera language. *Pacific Linguistics*, A-38:1-11.

1973b Morphophonemics of the Adzera language. *Pacific Linguistics*, A-38:13-19.

1973c A synopsis of the verb forms in Adzera. *Pacific Linguistics*, A-38:21-28.

1978 Adzera-English dictionary. TS, 374pp.

Holzkecht, S.

1986 A morphology and grammar of Adzera (Amari dialect), Morobe Province, Papua New Guinea. *Pacific Linguistics*, A-70:77-166.

Johnson, M.

1997 Organized Phonology Data of Atsera.