

GARAWA PHONOLOGY

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0. INTRODUCTION

The purpose of this paper is to present a phonemic analysis of the western dialect of the Garawa language.¹ A description is given of the phoneme, syllable and word levels.

Garawa is spoken by about 300 people living in the northeast of the Northern Territory of Australia, from Borroloola to Doomadgee in Queensland. There are two dialects of Garawa, eastern Garawa spoken in the area of Wollogorang cattle station and western Garawa spoken in the area of Robinson River cattle station.

1. CONSONANTS

There are nineteen consonantal phonemes in Garawa: the voiceless stops /p, t, t̥, tj, jk, k/ and the voiced nasals /m, n, ŋ, nj, jŋ, ŋ/ contrasting at the bilabial, apico-alveolar, apico-domal, lamino-alveolar, lamino-velar and velar points of articulation; the voiced laterals /l, j, lj/ contrasting at the apico-alveolar, apico-domal and lamino-alveolar points of articulation; a voiced apico-alveolar vibrant /ʀ/; and the voiced semi-consonants /w, γ, ɾ/ occurring at the bilabial, lamino-palatal and apico-domal points of articulation.

1.1 CONSONANT CONTRASTS

The stops contrast in word initial position:

/pula/	<i>they</i> (dual)
/tulala/	<i>tree</i> (species)
/tjulaki/	<i>bird</i> (generic)
/kula/	<i>south</i>

word medial position:

/wapa/	<i>bark</i>
/matamata/	<i>opossum fur</i>
/waɣapa/	<i>goanna</i> (species)
/watja/	<i>quickly</i>
/wajka/	<i>down</i>
/waka/	<i>call out</i>

The nasals contrast in word initial position:

/mulu/	<i>nose</i>
/nuɽu/	<i>we</i> (plural excl)
/njulu/	<i>he</i>
/ŋuluɽ/	<i>backbone</i>

word medial position:

/nanama/	<i>that</i> (non-specific)
/muŋana/	<i>at night</i>
/paŋaŋa/	<i>father's oldest brother</i>
/puwanja/	<i>older brother</i>
/laŋinajŋa/	<i>north across something</i>
/munaŋa/	<i>white man</i>

The laterals, the flap /ɽ/, and the semi-consonant /ɽ/ contrast in word medial position:

/kaŋala/	<i>skin grouping</i>
/tjuwaja/	<i>lying face down</i>
/walja/	<i>mammal</i> (species)
/nakaɽa/	<i>horse</i>
/ŋaɽaɽa/	<i>sun</i>

The apico-alveolar stop /t/ and flap /ɽ/ contrast in word medial position:

/matamata/	<i>opossum fur</i>
/ŋaɽawa/	<i>salt</i>

The apico-domal stop /ɽ/ and semi-consonant /ɽ/ contrast in word medial position:

/waɽapa/	<i>goanna</i> (species)
/ŋaɽapa/	<i>drink</i>

The bilabial stop /p/ and semi-consonant /w/ contrast in word initial position:

/patja/	<i>play</i>
/watja/	<i>quickly</i>

word medial position:

/ŋupŋu/	<i>boomerang (generic)</i>
/ŋuwu/	<i>water</i>

The lamino-alveolar stop /tj/ and lamino-palatal semi-consonant /y/ contrast in word initial position:

/tjŋku/	<i>sit</i>
/yundu/	<i>on top of</i>

word medial position:

/yatji/	<i>country</i>
/mayi/	<i>tooth</i>

1.2 CONSONANT VARIANTS

Both the apico-domal and the lamino-alveolar stops /t/ and /tj/ have an unreleased allophone [t̚] and [tj̚]:

/kutjpa/	[ku ⁱ t̚j̚p ^Λ ʷ]	<i>search</i>
/paʔpaʔtji/	[paʔp ^Λ ʷt̚t̚j̚t̚]	<i>tree (species)</i>

A voiceless aspirated velar stop [kʰ] occasionally occurs in word initial position as an allophone of the velar stop /k/:

/kaʔuwa/	[kaʔuwa ^ʷ ~ kʰaʔuwa ^ʷ]	<i>name of language</i>
/kaʔi/	[kaʔe ~ kʰaʔe]	<i>east</i>

The bilabial stop /p/ has a voiced allophone [b] in word initial position preceding semi-consonant /r/:

/pɾatji/	[br ^a t̚j̚t̚]	<i>tail</i>
/pɾaki/	[br ^a k̚t̚]	<i>ant (species)</i>

Each of the lamino-alveolar consonants /tj, nj, lj/ has an allophone with palatal release [tjʷ], [njʷ], [ljʷ], which occur in free variation with it preceding a vowel:

/tjalu/	[tjalu ~ tjʷa u]	<i>arm</i>
/patja/	[pa ⁱ t̚j̚ʷ ^ʷ ~ pa ⁱ t̚j̚ʷ ^ʷ]	<i>play</i>
/njulu/	[njulu ~ njʷu u]	<i>he</i>
/punji/	[po ⁱ n̚j̚t̚ ~ po ⁱ n̚j̚ʷ ^ʷ t̚]	<i>grass (species)</i>
/kulja/	[ku ⁱ l̚j̚ʷ ^ʷ ~ ku ⁱ l̚j̚ʷ ^ʷ]	<i>raw</i>

The apico-alveolar vibrant /ʃ/ fluctuates freely with a voiceless flap allophone [ʃ̥] in word final position; in emphasized speech the voiceless trill allophone [ʃ̥̃] tends to occur in word final position:

/kaʃi/	[kaʃe]	<i>east</i>
/liʃka/	[leʃkʌ˥]	<i>first born</i>
/waʃmpa/	[waʃmpʌ˥]	<i>blow</i>
/yi aʃ/	[yɛ ʌ˥ʃ ~ yɛ ʌ˥ʃ̥̃]	<i>poison</i>
/pitʃpawaʃ/	[pi˥ʃpʌ˥wa˥ʃ̥̃]	<i>fierce</i>

2. VOWELS

There are three vowel phonemes /i, a, u/. These contrast at front, central and back points of articulation.

2.1 VOWEL CONTRASTS

/mili/	<i>more</i>
/mali/	<i>flood waters</i>
/mulu/	<i>nose</i>
/ŋali/	<i>we (dual excl)</i>
/ŋala/	<i>while</i>
/ŋalu/	<i>cloud</i>

2.2 VOWEL VARIANTS

Each vowel has a retroflexed allophone preceding apico-domal consonants:

/yi aʃ/	[yɛ ʌ˥ʃ̥̃]	<i>poison</i>
/kaʃila/	[kɛʃelʌ˥]	<i>hip</i>
/kuŋŋaʃ/	[kʊŋŋʌ˥ʃ̥̃]	<i>smoke</i>

For each vowel there is a range of allophones which vary considerably; however the following distributions of the allophones tend to occur.

The front vowel /i/ has the allophones [i], [ɪ], [e], [ɛ], [e¹], [e¹·].

The allophone [i] occurs between non-velar and lamino-alveolar or lamino-palatal consonants:

/pitʃal/	[pitʃʌ˥i]	<i>partly</i>
/miya/	[miya˥]	<i>snake (generic)</i>

The glide [eⁱ] occurs between velar and lamino-alveolar or lamino-palatal consonants:

/kinjpa/	[ke ⁱ njpa ^ʌ ʷ]	<i>caught in something</i>
/mikukiyi/	[mekuke ⁱ yi]	<i>don't!</i>

The lengthened glide [eⁱ·] occurs preceding lamino-velar consonants:

/kijŋjki/	[ke ⁱ ·jŋjki]	<i>flying fox (species)</i>
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The allophone [e] tends to occur contiguous to laterals and vibrants:

/kaɣila/	[kaɣeila ^ʌ ʷ]	<i>hip</i>
/liɣka/	[leɣka ^ʌ ʷ]	<i>first born</i>

The allophone [ɛ] tends to occur following bilabials:

/piwali/	[pɛwale]	<i>opossum (species)</i>
/miku/	[meku]	<i>no</i>

The allophone [ɪ] tends to occur in other environments:

/nitji/	[nitji]	<i>name</i>
/tiŋutji/	[tiŋu ⁱ tji]	<i>tree (species)</i>

The central vowel /a/ has the allophones [a^ʌʷ], [a], [a^ʰʷ], [aⁱ·].

The glide [aⁱ] occurs preceding lamino-alveolar and lamino-palatal consonants:

/mayi/	[ma ⁱ yi]	<i>tooth</i>
/yatjpa/	[ya ⁱ tjpa ^ʌ ʷ]	<i>burn</i>

The lengthened glide [aⁱ·] occurs preceding lamino-velar consonants:

/majkaɣa/	[ma ⁱ ·jkaɣa ^ʌ ʷ]	<i>husband and wife</i>
/kulanajŋa/	[kula ^ʌ na ⁱ ·jŋa ^ʌ ʷ]	<i>south across something</i>

The low back allophone [a^ʰʷ] tends to occur between /w/ and /w/:

/wawaɣa/	[wa ^ʰ wa ^ʌ ɣa ^ʌ ʷ]	<i>baby boy</i>
/wawi/	[wa ^ʰ we]	<i>horse</i>

The low allophone [a] tends to occur in other stressed syllables:

/tjalu/	[tjalu]	<i>lower arm</i>
/ŋaɣawa/	[ŋaɣa ^ʌ wa ^ʌ ʷ]	<i>salt</i>

The lower mid allophone [a^ʌʷ] tends to occur in other unstressed syllables:

/nanamanŋa/	[nanan ^ʌ ʷman ^ʌ ŋa ^ʌ ʷ]	<i>same one</i>
/wukaɣa/	[woka ^ʌ ɣa ^ʌ ʷ]	<i>tree (species)</i>

The back unrounded vowel /u/ has the allophones [u], [o], [uⁱ·], [uⁱ·], [oⁱ·], [oⁱ·].

The glide [u¹] occurs between non-bilabial and lamino-alveolar or lamino-palatal consonants:

/yuyu/	[yu ¹ yu]	<i>yes</i>
/tjunjtjutupu/	[tju ¹ njtjutupo]	<i>bird (species)</i>

The lengthened glide [u¹·] occurs between non-bilabial and lamino-velar consonants:

/watjukanjɪ/	[wa ¹ tju ¹ ·jka ¹ njɪ]	<i>swatting</i>
/buŋujkanjɪ/	[boŋu ¹ ·jka ¹ njɪ]	<i>coming closer</i>

The glide [o¹] occurs between bilabial and lamino-alveolar or lamino-palatal consonants:

/maɭbuyuʃɪ/	[maɭbo ¹ yʊʃɪ]	<i>to the old man</i>
/munjtʃɪ/	[mo ¹ njtʃɪ]	<i>bush</i>

The lengthened glide [o¹·] occurs between bilabial and lamino-velar consonants:

/wujkutjpa/	[wo ¹ ·jku ¹ tj _p ʌ ^v]	<i>rub</i>
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The high allophone [u] tends to occur between non-bilabial and bilabial or apico-alveolar or velar consonants:

/lukuluku/	[ɭukɭukɭu]	<i>around</i>
/tjuntuʃ/	[tjuntʊʃ]	<i>sand</i>

The mid allophone [o] tends to occur word finally following bilabial consonants or between bilabial and bilabial or apico-alveolar or velar consonants:

/buntal/	[bontʌ ^v ɭ]	<i>river</i>
/kumu/	[kʊmo]	<i>flood waters</i>

4. SYLLABLES

There are three syllable types each with a single vowel nucleus. The prenuclear margin may be filled with one or two consonants while the postnuclear margin is limited to one consonant.

CV	ma.yɪ	<i>tooth</i>
CVC	tjaɭ	<i>flower (generic)</i>
CCV	waʃ.mpa	<i>blow</i>

A closed variant of the CCV syllable type [CCVC] occurs as the second syllable of a word between a CCV syllable and a CV syllable.

ʃʃa.ʃʃaŋ.ka	<i>bush fire burning</i>
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Words consist of from one to ten syllables. Words of six syllables or more are not frequently heard. Syllable types CV, CVC, and CCV may occur in any position in the word. However no more than three CVC syllables have been heard occurring contiguously.

ka.la.wuŋ.jku.ʃu	<i>inside</i>
ŋam.pa.la.ŋin.ku.ya	<i>our two</i>
miŋ.miŋ.tjal	<i>eyebrow</i>
kun.til.mpa	<i>make dry</i>
pʃa.tji	<i>ant (species)</i>
yuʃ.mpa.ka	<i>(he is) shifting</i>

5. WORD STRESS

In Garawa primary stress (indicated in this section by ') is always on the first syllable of the phonological word. Primary stress is manifested by loudness, high pitch and length.

yámi	<i>eye</i>
púnjala	<i>white</i>

Secondary stress (indicated by `) occurs on the penultimate syllable of words with four or more syllables. Secondary stress is manifested by less length and loudness than primary stress, while pitch is usually no higher than that of contiguous syllables. In words of six or more syllables tertiary stress (indicated by ~) occurs on every second syllable preceding the secondary stress but never on the second syllable.

wátjimpàŋu	<i>armpit</i>
kámalaʃinji	<i>wrist</i>
yákalākālampa	<i>loose</i>
ŋánkiʃikTʃimpàyi	<i>fought with boomerangs</i>
ŋámpalāŋinmūkunjina	<i>at our many</i>
náʃiŋinmūkunjTnamlʃa	<i>at your own many</i>
nímpalāŋinmūkunānjimlʃa	<i>from your own two</i>