

# THE PHONEMES OF NUNGGUBUYU

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## 0. INTRODUCTION

In Nunggubuyu twenty-four phonemes have been observed. There are nineteen consonants and five vowels, as tabulated below. There are also several contrastive intonation patterns.

	Bilabial	Inter-dental	Alveolar	Retro-flexed	Alveo-palatal	Velar
Stop	<i>b</i>	<i>dh</i>	<i>d</i>	<i>ɖ</i>	<i>dj</i>	<i>g</i>
Nasal	<i>m</i>	<i>(nh)</i>	<i>n</i>	<i>ɳ</i>	<i>nj</i>	<i>ŋ</i>
Lateral		<i>lh</i>	<i>l</i>	<i>ɭ</i>		
Vibrant			<i>r</i>			
Semi-vowel	<i>w</i>			<i>ɹ</i>	<i>y</i>	

  

	Front Unrounded	Central Unrounded	Back Unrounded
High			
close			
open	<i>i</i>		<i>u</i>
Mid			
close			
open			
Low			
close	<i>(æ)</i>	<i>a</i>	
open		<i>a:</i>	

The alveo-palatal consonants are articulated with the blade of the tongue against the front of the hard palate, while the tongue tip rests behind the lower teeth.

## 1. PHONEME CONTRASTS

The stops /*b*/, /*dh*/, /*d*/, /*ɖ*/, /*dj*/, and /*g*/ and the vibrant /*r*/ contrast as follows:

<i>balanu</i>	'always'	<i>bula:yi</i>	'container'
<i>dharag</i>	'whiskers'	<i>dhulmuŋ</i>	'stomach'
<i>darawa</i>	'greedy'	<i>dudumadj</i>	'black'
<i>ɖalhidj</i>	'law corroborree song'	<i>ɖul</i>	'camouflage'
<i>djaru</i>	'needle'	<i>djuɭuwu</i>	'black ibis'
<i>gariwa</i>	'greenshell turtle'	<i>guɭabidjbidj</i>	'beach curlew'

*biriŋgił* 'swamphen'  
*dhiraŋi* 'barnacle'  
*dini* 'those two (men)'  
*riŋaŋ* 'mother'  
*đirbabaŋa* 'brave'  
*djiridjiriŋał* 'willy wagtail'  
*giŋigigiwu* 'tern'

*wubuy* 'Nunggubuyu'  
*ŋurudhu* 'bird'  
*dhududju* 'steel'  
*wurugu* 'later'  
*muđuŋ* 'grass-nut'  
*gurudjudjuŋ* 'whistling eagle'  
*wurugu* 'billabong'  
*malwad* 'hibiscus'  
*lhar* 'crossing'  
*djirwađ* 'string necklace'  
*muwadž* 'name'  
*wuwag* 'crow'

*wuŋid* 'flat-stone'  
*mir* 'hornet'  
*yiđđiđ* 'osprey'  
*akararidj* 'deep'  
*wirig* 'small'

*wałabalamidj* 'flat'  
*adhadhari* 'behind'  
*mada* 'part of pipe'  
*wara* 'lungs'  
*lharada* 'black bream'  
*adja* 'school shark'  
*yaga* 'is it?'

*bibi* 'uncle'  
*widhir* 'mangrove clearing'  
*arbidi* 'free'  
*wirig* 'small'  
*giđigiđi* 'catfish eel'  
*djidji* 'sore'  
*giŋigigiwu* 'tern'

*wurwur* 'mopoke'  
*lhuđ* 'power'  
*munjdjudj* 'plum'  
*yanug* 'perch fish'

The nasals /m/, /n/, /ŋ/, /nj/, and /ŋ/ contrast as demonstrated below. The phoneme /nh/ is rare and has not been included in these contrasts. It occurs preceding the interdental stop /dh/, and intervocally in the two words /manha/ 'blue egret', /munhal/ 'small freshwater fish'.

*maŋag* 'red pandanus nut'  
*nangi* 'father-in-law'  
*ŋaŋuru* 'catfish'  
*njanay* 'long way'  
*ŋaŋma* 'long scar'  
*mir* 'hornet'  
*niri* 'he (neg.)'  
*niłaniła* 'cicada'  
*njiŋi* 'murder song'  
*ŋiri* 'she (neg.)'  
*łamumu* 'greedy'  
*wunuwini* 'they killed him'  
*wunuga* 'money'  
*munjugu* 'swamp-nut'  
*wuŋunuwini* 'they (2f.) killed him'

*mun* 'shoulder joint'  
*nunđugi* 'don't cry!'  
*nuŋma* 'magpie geese'  
*njuwar* 'Mouth Almighty fish'  
*ŋuŋidj* 'jealous'  
*amaŋ* 'liver'  
*manaŋa:* 'tooth'  
*ana* 'mangrove'  
*nuŋanjaŋ* 'wild fig'  
*a:ŋa* 'camp'  
*mimi* 'milk'  
*ninig* 'tender'  
*miŋiguya* 'soft wax'  
*winjiŋ* 'small'  
*wiŋiyaygi* 'they (2f.) went'

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<i>mun</i>	'foot'	<i>alanjan</i>	'sap'
<i>mun̩</i>	'shoulder joint'	<i>wunjan̩</i>	'chest'
<i>a:munj</i>	'fly'	<i>lhanj</i>	'tongue'
<i>muŋ</i>	'hair'	<i>yaŋ</i>	'voice'
<i>wuŋuruɖin</i>	'wild banana'		
<i>marin̩</i>	'basket'		
<i>ŋuninj</i>	'adultery'		

The phonemes /lh/, /l/, /l̩/, /ɾ/ and /r/ contrast as follows:

<i>lhal</i>	'country'	<i>lhud̩</i>	'power'
<i>ladag</i>	'milk tree'	—	
<i>ɻaruwa</i>	'bamboo'	<i>ɻudhay</i>	'canoe name'
<i>ɻala</i>	'pelvis'	<i>ɻu</i>	'tear'
<i>lhiridj</i>	'cassava'	<i>nalhalar</i>	'coral'
<i>liriyal</i>	'seagrass'	<i>a:la</i>	'river'
<i>ɻirag</i>	'blue tongue lizard'	<i>maɻa</i>	'centipede'
<i>ɻiridji</i>	'gravel'	<i>aɻa</i>	'arm'
<i>rigaŋ</i>	'mother'	<i>wara</i>	'lungs'
<i>wulhuwulhur</i>	'beginning'	<i>wumilhi</i>	'it is shining'
<i>wurdjulugu</i>	'Long Tom fish'	<i>wili</i>	'ready'
<i>wuɻuɻugu</i>	'wild fruit'	<i>miɻi</i>	'mullet'
<i>wurugu</i>	'billabong'	<i>miyiri</i>	'star'
<i>wurugu</i>	'later'	<i>wirig</i>	'small'
<i>lhal</i>	'country'	<i>yul</i>	'bush'
<i>yaɻ</i>	'hibiscus'	<i>wuɻwuɻ</i>	'tadpole'
<i>lhar</i>	'bark'	<i>lhurthur</i>	'sturdy'
<i>lhar</i>	'crossing'	<i>wurwur</i>	'mopoke'
<i>mabiɻil</i>	'water lily leaf'		
<i>lhambiɻbiɻ</i>	'tree'		
<i>yiriwiriwiri</i>	'a swallow'		
<i>mir</i>	'hornet'		

The vowels /a/, /a:/, /i/ and /u/ contrast as indicated below. The phoneme /æ/ is rare and has not been included here. It varies freely with /a/ in the two girls' names /yambunidja/ and /yidaŋga/ and occurs elsewhere only in /yæmba/ 'for', /yaguyæmba/ 'because', and /galmiɻiyæra/ 'beetle'.

<i>aniga</i>	'where? (cl.III)'	<i>ada:nu</i>	'that (cl.III)'
<i>a:ni</i>	'this (cl.III)'	<i>a:di</i>	'road'
<i>yagi</i>	'not'	<i>bayamaŋ</i>	'you say'
<i>ya:gi</i>	'here (cl.I,II)'	<i>baya:maŋ</i>	'be afraid!'
<i>yigadj</i>	'see'	<i>anayimbadj</i>	'today'
<i>yuga</i>	interrogative	<i>a:niyumba</i>	'this time'
<i>yarwari</i>	'leatherskin fish'	<i>yaga</i>	'is it?'
<i>wa:ri</i>	'running water'	<i>yagi</i>	'not'
<i>gawira</i>	'pelican'	<i>yagu</i>	'but'

<i>wuralg</i>	'kookaburra'	<i>adja</i>	'school shark'
<i>a:ga</i>	'camp'	<i>wudji</i>	'fog'
<i>yaŋi</i>	'what?'	<i>ba:dju</i>	'nail'
<i>djarəŋu</i>	'horse'		

## 2. PHONEME VARIANTS

The stops /b/, /d/, /dj/, and /g/ vary as follows: In word initial and pre-consonantal positions, they are usually voiceless and unaspirated. In intervocalic and post-consonantal positions, they vary freely between voiceless and voiced unaspirated. In word final position, they vary freely between voiceless aspirated and voiceless unaspirated.

The vibrant /r/ tends to be flapped in intervocalic position. In word final and pre-consonantal positions, it tends to be trilled.

The semivowel /r/ is a retroflexed central vocoid which has approximately the same tongue position as the preceding vowel. The sequence /ir/ is phonetically the single retroflexed vocoid [ɛ̣].

Vowels. Free variants of the high open front /i/ range between raised [i̇], lowered [ị], and central [ɪ].

The low open central unrounded /a:/ tends to be lengthened by some speakers. The vowels /a/ and /a:/ tend to have a high front off-glide preceding /dj/ and /nj/. Free variants of the high open back unrounded /u/ range between raised [u̇], mid close [ɘ], and backed central [ʉ]. After /w/ the phoneme /u/ tends to be laxly rounded.

**Stress.** Stress is non-phonemic and can be predicted as follows:

(a) When /a:/ occurs, the stress always falls on the syllable containing /a:/.

<i>/baya:maŋ/</i>	'be afraid'
<i>/aŋmamaŋaŋ/</i>	'clean water'
Alternative <i>/anidjgala:di/</i>	'bad things'

(b) When /a:/ does not occur, primary stress falls on the initial syllable and secondary stress falls on following alternate syllables.

<i>/yaga/</i>	'is it?'
<i>/bayambaŋ/</i>	'you say it'
<i>/bayamana/</i>	'you do it like that'
<i>/ŋadjiwalhuwa/</i>	'Samson fish'
<i>/midjabuɖubuɖu/</i>	'flathead'

## 3. SYLLABLE PATTERNS

There are five basic syllable types, the nucleus of each being a vowel.

V	/i/	'yes'
VC	/aŋ/	'water from a tree'
	/aɪ/	'dugong-float'

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CV	/ŋa/	'and'
	/ra:/	'tooth'
CVC	/mun/	'foot'
	/mir/	'hornet'
CVCC	/yilg/	'silly'

The predominant syllable patterns are CV and CVC. All combinations of up to 10 syllables may occur, except for the following limitations:

- (a) V and VC only occur word initially.
- (b) CVCC only occurs word medially and finally.

Some examples of each syllable in the various positions are as follows:

Syllable type	Word Initial	Word Medial	Word Final
V	/a.dja/ 'shark'	—	
VC	/an.dji/ 'jabiru-bird'	—	
CV	/ba.ba/ 'father'	/da.ga.wag/ 'crayfish'	/ya.ga/ 'is it?'
CVC	/mal.wad/ 'hibiscus'	/wun.dal.ma.ri/ 'salmon-herring'	/wil.dhug/ 'rifle-fish'
CVCC	/yilg.lha.ŋu/ 'completely silly'	/ba.yilg.ba.laŋ/ 'you are silly'	/wu-murŋ/ 'house'

Sometimes there is free variation in the pronunciation of words which affects their syllable pattern, and makes it possible for word medial V syllables to occur.

/ŋunuwarawini/ or /ŋunuarawini/ 'we (crowd) hit him'

ŋu.nu.wa.ra.wi.ni.

ŋu.nu.a.ra.wi.ni

CV.CV.CV.CV.CV.CV CV.CV.V.CV.CV.CV