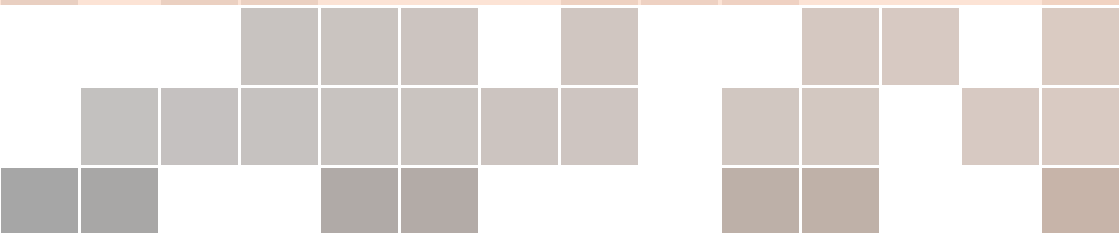


Ngujari

A Grammar and Lexicon

Cadel Watson



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Contents

I

Grammar

1	Phonology	9
1.1	Phonetic Inventory	9
1.1.1	Consonants	9
1.1.2	Vowels	9
1.2	Phonotactics	11
1.2.1	Syllables and Morae	11
1.2.2	Parts of Speech	11
1.2.3	Vowels	11
1.2.4	Consonants	12

1.2.5	Historical Sound Changes	12
1.3	Prosody	13
1.3.1	Stress	13
2	Morphology	15
2.1	Nouns	15
2.1.1	Gender	15
2.1.2	Cases	16
2.2	Plurality	17
2.3	Verbs	17
2.3.1	Irregular Auxiliaries	18
2.3.2	Tense and Mood	18
2.3.3	Verbal Conjugation Tables	19
2.3.4	Auxiliary Conjugation Tables	19
2.3.5	Verbal Arguments	20
2.4	Adjectives and Adverbs	21
3	Derivation	23
3.1	Lexical Derivation	23
3.1.1	Verbs	23
3.1.2	Nouns	24
3.1.3	Adjectives	25
3.2	General Derivation	25
3.2.1	Adjectives	25
3.2.2	Nouns	27
3.3	Verbs	28
3.3.1	Nominalisation	28

4	Pronouns	29
4.1	Personal	29
4.2	Possessive	30
4.3	Interrogative	30
4.4	Demonstrative	31
4.5	Indefinite	31
5	Syntax	33
5.1	Alignment	33
5.2	Verb Phrases	33
5.3	Noun Phrases	34
5.4	Relative Clauses	34
5.4.1	Adverbial Phrases	35
5.5	Predicates	35
5.6	Possession	36
5.6.1	Alienable	36
5.6.2	Inalienable	37
5.6.3	Pronominal	37
5.7	Verbal Constructions	38
5.7.1	Interrogative	38
5.7.2	Comparative	38
5.7.3	Conditional	39
5.7.4	Negative	40
5.7.5	Reflexive/Reciprocal	41
5.8	Gerunds	41
5.9	Causatives	42
5.9.1	Comitative Causative	42

5.9.2	Subjunctive Purposive	42
5.10	Subjunctive	43
5.10.1	Desires	43
5.10.2	Speculation	43

II Meaning

6	Semantics	47
6.1	Numbers	47
6.2	Colours	48
6.3	Kinship	48

III Lexicon

Bibliography	55
Books	55
Articles	55

Grammar

1	Phonology	9
1.1	Phonetic Inventory	
1.2	Phonotactics	
1.3	Prosody	
2	Morphology	15
2.1	Nouns	
2.2	Plurality	
2.3	Verbs	
2.4	Adjectives and Adverbs	
3	Derivation	23
3.1	Lexical Derivation	
3.2	General Derivation	
3.3	Verbs	
4	Pronouns	29
4.1	Personal	
4.2	Possessive	
4.3	Interrogative	
4.4	Demonstrative	
4.5	Indefinite	
5	Syntax	33
5.1	Alignment	
5.2	Verb Phrases	
5.3	Noun Phrases	
5.4	Relative Clauses	
5.5	Predicates	
5.6	Possession	
5.7	Verbal Constructions	
5.8	Gerunds	
5.9	Causatives	
5.10	Subjunctive	



1. Phonology

1.1 Phonetic Inventory

1.1.1 Consonants

In terms of phonology, Ngujari has a rich consonantal inventory featuring a large series of coronal consonants (both laminal and apical) and multiple rhotics. The following table shows the consonants and their orthographic representation in *italics* (if different from the IPA).

1.1.2 Vowels

The vowel palette is very restricted, limited to just a, i, and u, as well as their lengthened versions. The long vowels are contrastive in all locations. These phonemes are found in the following table.

Orthographically, the short vowels are expressed according to their IPA representation. Long vowels are simply the short vowel doubled.

The front vowels (i and a) are phonetically tense. Both have a nasalised allophone.

The back vowel u is divided allophonetically into two sounds: the default u, and

	bilabial	alveolar	post-alveolar	retroflex	palatal	velar
plosive	p	$\underset{\sim}{t}(t)$		$\underset{\sim}{t}(rt)$		k, g
nasal	m	$\underset{\sim}{n}(n)$	$\underset{\sim}{n}(nn)$	$\underset{\sim}{n}(m)$		$\underset{\sim}{n}(ng)$
tap		$\underset{\sim}{t}(rr)$				
fricative			$\underset{\sim}{s}(j)$			
approximant	w			$\underset{\sim}{r}(r)$	j(y)	
lateral approximant		$\underset{\sim}{l}(l)$		$\underset{\sim}{l}(rl)$		

Table 1.1: Consonantal Inventory

	front	back
high	i, i:	u, u:
low	a, a:	

Table 1.2: Vowel Inventory

the somewhat centralised \ddot{u} which tends towards the υ sound and is accordingly more lax than the default.

1.2 Phonotactics

1.2.1 Syllables and Morae

The structure of Ngujari words is simple, with syllables taking the form CV(C): one consonant is followed by one vowel and an optional consonant (dependent on permitted consonant clusters). A root word is usually between two and four syllables long, plus any affixes, which tend to be single-syllable.

Words can be broken into *morae*. A syllable containing a short vowel is worth one mora, but those containing long vowels are worth two. This distinction becomes important when dealing with prosody in section 1.3.

1.2.2 Parts of Speech

Some additional phonotactic restrictions are placed on specific parts of speech:

- Nouns always end in a vowel.
- Verbs always end in a consonant.

1.2.3 Vowels

The u phoneme becomes centralised following the bilabial consonants p , m , and w .

Definition 1.2.1 — Centralisation.
 $u \rightarrow \ddot{u} / _ \{p, m, w\}$

The i and a phonemes are nasalised before alveolar and post-alveolar nasals.

Definition 1.2.2 — Nasalisation.
 $i \rightarrow \tilde{i} / _ \{\underset{v}{n}, \underset{v}{\eta}\}$
 $a \rightarrow \tilde{a} / _ \{\underset{v}{n}, \underset{v}{\eta}\}$

1.2.4 Consonants

Positioning

There are some restrictions placed on consonant clusters. The following combinations are the only allowable clusters:

- rhotic/liquid + non-retroflex nasal
- rhotic/liquid + non-rhotic approximant
- nasal + non-rhotic approximant/stop
- approximant + stop
- retroflex + stop

In terms of other restrictions, approximants are never found at the end of a word.

Rhotics

The retroflex approximant ɭ disappears between identical regular vowels, forming one lengthened vowel.

Definition 1.2.3

ɭ → ∅ / a _ a, u _ u, i _ i

Voicing

The voicing process is relatively new to the language, and accordingly not much variation is present. Generally, plosives are becoming initially voiced. However, in practice the voiced plosive g is the only new voiced consonant sufficiently formed to be included as an individual phoneme; the rest are in the process of undergoing the differentiation. In the case of the ɖ phoneme, only the alveolar form undergoes voicing, as the retroflex cannot begin a word.

Definition 1.2.4 — Voicing.

k → g / ^ _

p → ɓ / ^ _

ɖ → ɗ / ^ _^a

^aThe phoneme remains apical, but this cannot be expressed in IPA.

1.2.5 Historical Sound Changes

Ngujari differs phonologically from Proto-Pama-Nyungan only slightly. The following is a list of sound changes that have occurred:

- Apicalised post-alveolar plosive (ɖ) becomes voiced post-alveolar fricative (ʒ).
- Apicalised alveolar trill (ɖ) becomes apicalised alveolar tap (ɾ).

- Retroflex approximant (ɻ) disappears between identical regular vowels, forming one lengthened vowel.
- Apicalised alveolar lateral approximant (ɭ) disappears from the end of words.

A major difference occurs in the case of lengthened vowels, which can differentiate words in all positions, rather than just the first syllable as in the protolanguage.

1.3 Prosody

Ngujari has a rich prosodic system incorporating stress, intonation, and tempo. Stress is dealt with here, but intonation and tempo are left to Part 2 in the discussion on pragmatics.

1.3.1 Stress

Stress follows a simple process. The primary stress is placed on the second mora of the word. If that mora is part of the first syllable (i.e. the first syllable has a long vowel rendering it bimoraic), the first syllable is stressed. Secondary stress is then placed on morae at even intervals, on the 4th, 6th, etc. However, if the secondary stress would fall on the second mora of a bimoraic syllable, it is skipped.



2. Morphology

2.1 Nouns

2.1.1 Gender

Ngujari has four genders: child, adult, elder (grouped together as animate), and inanimate. Gender is assigned semantically and changes the morphosyntactic alignment of the sentence as well as possessives.

The animate gender is given to people, animals, and Dreamtime figures. For example, *Yawirra*, the concept of the Land, is considered animate. The inanimate gender applies to all other nouns.

Within the animate there are three genders, each representing a different stage in life. This distinction is important in areas such as pronouns, but not in others, like verbal inflection. An animate noun is assigned to a stage based on their social position. Those who are yet to undergo the adulthood ceremony (those under roughly 14 in the case of females and 16 in the case of males) are assigned the child gender, while those who have become elders receive the elder gender. All other ages are grouped into the adult gender.

2.1.2 Cases

Ngujari has eight nominal cases, with three indicating the morphosyntactic alignment and five others. Cases are indicated by single-syllable suffixes, as indicated in the following table.

case	abbreviation	suffix
ergative	ERG	-
nominative	NOM	-j
accusative	ABS	-l
instrumental	INS	-ma
comitative	COM	-yi
orientative	ORI	-rnu
revertive	REV	-rna
locative	LOC	-rn

Table 2.1: Case Suffixes

For more details on the three alignment cases, see ?? (pg. ??). The remaining five cases operate as follows:

instrumental The instrumental case is used when discussing a *means*, roughly equivalent to the English “by means of”. For example, when speaking of killing a fish using a spear, a Ngujari speaker will place “spear” in the INS case.

comitative The comitative case is equivalent to “in the presence of”, or “with”, and specifies that the noun was present at the moment spoken of.

orientative The orientative case is used to specify that something is facing towards the noun. It is often used with the meaning of “heading towards”.
aux 2s-ERG camp-ORI togo-an-2nd.
You are heading towards the camp.

revertive The revertive case is used to specify that something is oriented away from the noun. It can be used with the meaning of “heading away from”.
aux 3pl-an-NOM 3s-an-REV togo-an-3rd.
They are heading away from her.
It can also be used in asserting falsehood.
aux-remote 3s-an-ERG knowledge-NOM valence1->2 tolook-an-3rd.
He used to look away from knowledge / he used to be incorrect.

locative The locative case is used to specify a location, and can take the place of a preposition such as “in” or “at”. This means that “she is at the house” is equivalent to “she is [house] (LOC)”. The locative suffix *-ru* becomes a long u if placed after a word ending in a short u.

An example of the use of these cases is found in the following table, which shows the declensions of the noun *naju*, or “rock”.

case	word	meaning
ergative	naju	-
nominative	najuj	-
accusative	najul	-
instrumental	najuma	“using the rock”
comitative	najuyi	“in the presence of the rock”
orientative	najurnu	“oriented towards the rock”
revertive	najurna	“orientated away from the rock”
locative	najurn	“at the rock”

Table 2.2: Examples of Nominal Case Declensions

2.2 Plurality

Plurals are formed through reduplication, with the declined noun repeated twice. For example, *najurru* (“rock”, in the absolutive case), would be pluralised as *najurru-najurru*.

There are two forms of plural, which differentiate dual and non-dual plurality. The default case is non-dual, but the clitic *ka* following the reduplicated noun indicates the dual form.

2.3 Verbs

Verbs in Ngujari are found in three classes, each with a specified stem ending and auxiliary form. Verb roots lack a final consonant, meaning they must be conjugated in order to appear in speech. Class does not have any semantic impact; it changes only the morphology of the verb.

The three classes are:

class	ending	auxiliary	negative particle
first	-rr	k-	tu
second	-j	j-	ti
third	-nn	nn-	wuu

Table 2.3: Verb Classes

To conjugate a verb, both it and its auxiliary must be declined. The verb itself is conjugated in agreement, with the gender and person of the subject indicated as affixes. The auxiliary is declined to indicate tense and mood.

2.3.1 Irregular Auxiliaries

There are seven major verbs in Ngujari which have an irregular auxiliary. Each auxiliary is a modified form of the base verb and must be learned separately. Conjugation follows the verb's class and proceeds as normal.

ngurr
to be
⇒ *ngarr*

gulwaj
to give
⇒ *gulw*

gurr
to have
⇒ *garr*

nnurr
to cause/effect
⇒ *nnarr*

wann
to know (facts, from
experience)
⇒ *wunn*

yurr
to know (facts, from
hearsay)
⇒ *yirr*

girr
to feel/sense/intuit
⇒ *gurr*

2.3.2 Tense and Mood

There are four tenses: remote past, past, present, and future. There is no distinction drawn between the perfective and imperfective aspects, meaning contextual clues are vital for understanding.

Present is considered the default tense, and is accordingly unmarked for first and second class verbs (but not third). It usually indicates those events which are happening in the moment of utterance, but it can also be used as a rudimentary form of a near-past tense, applying to actions that were completed the same day as the utterance.

Past and remote past are marked for all verb classes and indicate an event that was completed in the past. Choice between the two can be somewhat arbitrary, but in general remote past is used when recounting handed-down stories or the events of ancestral times, whereas basic past refers to events in the time period of the speaker. If the event has not yet finished, the present tense is used.

Future is again marked for all classes. All events which are yet to take place are assigned the future tense.

There are five moods that a verb can optionally be conjugated for:

- subjunctive
- weak imperative
- strong imperative
- gnomic

- dubitative

subjunctive The subjunctive mood is an irrealis mood which broadly signifies abstractness and is used in a number of ways:

1. Speculation
2. Conditional
3. Desires
4. Purposive

imperative The imperative mood is used for suggestions and commands. The weak form raises an idea without indicated an order, similar to the English “let’s go”, whereas the strong form signifies a command, such as “Leave!”.

gnomic The gnomic mood states unequivocal facts or ideas. The statement must be truly uncontentious to fit into the gnomic mood, such as “fire is real”.

dubitative The dubitative mood indicates situational possibility, in that the speaker acknowledges the possibility of an action but is unsure as to whether it occurs, as in English “might”.

2.3.3 Verbal Conjugation Tables

class	child	adult	elder	inanimate
first	uu	u	iiwa	a
second	awuu	awu	iwu	a
third	arruu	u	iwu	aa

Table 2.4: Gender of Subject

class	1st	2nd	3rd
first, second	-	n	m
third	-	ku	mi

Table 2.5: Person of Subject

2.3.4 Auxiliary Conjugation Tables

class	remote past	past	present	future
first	arlu	a	i	aa
second	arlu	a	i	aa
third	una	uma	uu	uuki

Table 2.6: Tense

class	subjunctive	weak imperative	strong imperative	gnomic	dubious
first	tiru	yii	ju	nga	tila
second	tirlu	yii	yuu	nga	ti
third	tiru	yii	ju	nga	ti

Table 2.7: Mood

2.3.5 Verbal Arguments

Arguments to verbs must fit two criteria: number and case. A verb takes a number of arguments equal to its valence, which can be modified (see section 2.3.5). Each form of the verb specifies the case of its arguments. The majority of verbs with valence two take a subject and an object in the correct alignment (see section 5.1).

However, this can differ, especially in the case of verbs relevant to movement which may take a subject and a location. In the case of verbs requiring an argument in the locative case, the argument may instead be placed in the reveritive or orientative case for further control over meaning.

Valence Modification

The verbal system of Ngujari allows for many different valences through derivations of base verbs. Each verb root has its own *default valence*, between avalent (0 arguments) to quadrivalent (4 arguments). Furthermore, each verb has a *minimum valence* and *maximum valence*, i.e. the extent that valency can be modified while still modifying the verb's meaning, rather than imparting additional information. The maximum valence is never above 4.

For example, the verb *wurr* has a default valence of 0, in which case it means “it is electrically storming”. However, modifying its valence to 1 allows it to mean “to be struck by lightning”, and a valence of 2 allows it to mean “to strike”. Therefore, it has a minimum valence of 0 and maximum valence of 2.

Valence modification occurs through special particles, which are found in the following table:

		target				
		0	1	2	3	4
default	0	—	wi	ji	murnu	yurnu
	1	wi	—	naa	naki	mu
	2	waa	ka	—	naa	naki
	3	wangu	waa	ka	—	naa
	4	wirru	wangu	waa	ka	—

Table 2.8: Valence Modification Particles

The main functions of derived valences are to either change the root meaning of the verb or modify its arguments. In both cases, the new meaning and arguments must be learned.

Common Verb Valences

For each of the seven verbs with irregular auxiliaries, the different possible valences and accordingly arguments are shown below. The default valence appears in bold. The argument markers *SUBJ* and *OBJ* refer to the subject and object respectively, which differs according to alignment.

ngurr
to be
(2) SUBJ is OBJ

gulwaj
to give
(2) SUBJ gives to OBJ
(3) SUBJ gives COM to OBJ

gurr
to have
(2) SUBJ has OBJ
(3) SUBJ has OBJ in COM manner¹

nnurr
to cause/effect
(2) SENTENCE causes SENTENCE²

wann
to know (facts, from experience)
(1) SUBJ knows
(2) SUBJ knows OBJ
(3) SUBJ knows OBJ because of INST

yurr
to know (facts, from hearsay)
(1) SUBJ knows
(2) SUBJ knows OBJ
(3) SUBJ knows OBJ on the authority of COM

girr
to feel/sense/intuit
(1) SUBJ senses something
(2) SUBJ feels that SENTENCE³

2.4 Adjectives and Adverbs

Adjectives are inflected into two categories: attribute and predicate. The attributive form is unmarked, and can be used directly in noun phrases to describe

¹For an example of the use of the comitative slot, see the constituent negative in subsection 5.7.4.

²The verb *nnurr* is a special case. See subsection 5.9.2.

³Where the sentence is in the subjunctive mood.

the noun. The predicate form can only be used in predicative phrases, and is declined according to the gender of the noun it applies to.

To decline a predicate adjective, two steps are required:

1. If the adjective ends in a vowel, its last consonant is added to the end. Otherwise, it is unmodified.
2. The relevant gender suffix of a class one verb is added as a suffix.

Adverbs are not declined, but are divided semantically into the classes manner (hastily, carefully) and temporal (last week, yesterday). The class of an adverb loosely determines its position in a phrase. See ?? for more information.



3. Derivation

There are two types of derivation in Ngujari. The first, lexical derivation, is not applicable *generally*, and is instead used during word formation to derive new vocabulary. While the patterns are regular, the application is not. On the other hand, general derivation allows the modification of existing words, including changing part of speech (such as in verb nominalisation).

3.1 Lexical Derivation

3.1.1 Verbs

As verb roots are a closed class, derivation is the only way to form new verbs. This method is known as **compounding**.

Compounding

There are two forms of compounding: verb-verb and adverb-verb. Both form a new verb which is treated as a whole in syntactic structures.

In verb-verb compounding, the compound is not commutative, meaning that

the order of the verbs matters. Typically, the most relevant verb occurs last. The two verbs are simply concatenated, except for the special case in which the concatenation would form an illegal consonant cluster. If this occurs, the repair strategy of inserting the dummy vowel *a* is used.

to sit <i>walj-</i>	to travel <i>nuunn-</i>
to swim <i>junn-</i>	to exchange <i>murr-</i>
⇒ to canoe <i>waljunn-</i>	⇒ to trade (with another mob) <i>nuunnamurr-</i>

Verbs formed through verb-verb compounding in most cases assume the transitivity properties of the second, or primary, verb.

Adverb-verb compounding simply requires an adverb to appear before the verb in all positions. For example, it would remain in front of the verb during relativization (see 5.4) while regular adverbs would not.

to run <i>yaj-</i>	to drink <i>ngann-</i>
quickly <i>garrna</i>	impatiently <i>karlpai</i>
⇒ to sprint <i>garrna yaj-</i>	⇒ to guzzle <i>karlpai ngann-</i>

A common use of adverb-verb compounding is in augmentation and diminuation. The adverbs *purki* (“weakly”) and *puwa* (“strongly”) are used to modify the intensity of the verb.

to eat <i>jinn-</i>	to give <i>gulwaj-</i>
⇒ to nibble <i>purki jinn-</i>	⇒ to offer <i>purki gulwaj-</i>
⇒ to bite <i>puwa jinn-</i>	⇒ to force upon <i>puwa gulwaj-</i>

3.1.2 Nouns

There are many noun derivational operations.

Compounding

Nominal compounds are bidirectional, meaning that the order of constituent nouns does not change the meaning of the compound. In practical use, both orders are used, with preference depending on the phonetics of the noun. If the compounding would create an illegal consonant cluster, the other order must be used.

mountain <i>gaypa</i>	the Land <i>Yawirra</i>
stream <i>munna</i>	ground <i>nnalu</i>
⇒ mountain stream <i>gaypa-munna</i>	⇒ sacred place <i>Yawirrannalu</i>

Collection

Partial reduplication can be used to derive the collection of a noun. To derive the collection, the first syllable is isolated, its coda removed, and added to the front of the noun.

coconut <i>wurna</i>	bone <i>parrna</i>
⇒ coconut tree <i>wuwurna</i>	⇒ corpse <i>paparrna</i>

Container

The container of a noun can be derived through the affix *rna*.

arrow <i>yungi</i>	fruit <i>yirli</i>
⇒ quiver <i>jungirna</i>	⇒ basket <i>yirlinga</i>

3.1.3 Adjectives

Cases

Noun case suffixes can in some cases be used to derive adjectives based around that noun. The most common forms of case derivations are orientative/revertive and instrumental.

Orientative and revertive suffixes can be used to indicate the “direction” of an adjective in relation to its noun. This distinction is commonly found when talking about time.

age <i>jul</i>	freshness <i>gurlu</i>
⇒ new <i>jurni</i> (orientative)	⇒ fresh <i>gurlurni</i>
⇒ old <i>julnga</i> (revertive)	⇒ stale <i>gurlunga</i>

3.2 General Derivation

3.2.1 Adjectives

Negation

An adjective can be negated through a prefix. If the adjective begins with a stop, the prefix is *wuu*. Otherwise, it is *tu*.

long (distance) <i>yungi</i>	heavy (rain) <i>ganu</i>
⇒ short (distance) <i>tuyungi</i>	⇒ light (rain) <i>wuuganu</i>

Amplification

An adjective can be amplified in magnitude through reduplication. The final syllable is duplicated, excluding its coda in the first instance. If the final vowel is long following the derivation, it becomes shortened.

big <i>yampu</i>	small <i>pangii</i>	thick <i>yurlan</i>
⇒ enormous <i>yam-pupu</i>	⇒ tiny <i>pangiigi</i>	⇒ fat <i>yurlarlan</i>

Relativisation

Many of Ngujari's adjectives are absolute rather than relative. For example, *yampu* ("big") refers to something bigger than a human, rather than something big for its class (as in "the big elephant"). These absolute adjectives can be converted to relative adjectives through the suffix *pu*.

small (absolute) <i>pangii</i>	warm (absolute) <i>mirra</i>
⇒ small (relative) <i>pangiipu</i>	⇒ warm (relative) <i>mirrapu</i>

3.2.2 Nouns

For all general derivations of nouns, the noun must be placed into derived form by lengthening its final vowel (if the vowel is unlengthened). A modifying suffix is then appended.

Diminuation/Amplification

A noun's *scale* can be adjusted up or down through the following suffixes:

function	suffix
amplification	-rki
diminuation	-wa

This operation is commonly lexicalised, but can be applied generally.

fire <i>panwa</i>	wind <i>gaju</i>
⇒ ash <i>panwawa</i>	⇒ breath <i>gajuwa</i>
⇒ bushfire <i>panwarki</i>	⇒ high wind <i>gajurki</i>

Temporalisation

A noun can be modified into a temporal noun, meaning the equivalent of “time of noun”, using the suffix *ku*.

moon *tii*
 ⇒ *tiiku* *night*

sun *puu*
 ⇒ *day puuku*

3.3 Verbs

3.3.1 Nominalisation

Apart from the gerund formation process (see Syntax chapter), verbs may become nouns through the process of nominalisation. The nominal form is simply the verb with its final vowel added to its end and shortened, plus the relevant suffix.

For locational nouns, as in “place of verb”, the suffix is *nnalu* (“ground”).

to see *pirr-*
 ⇒ *eye pirrinnalu*

to hold *wuj-*
 ⇒ *hand wujunnalu*

For professional nouns, as in “person who does verb”, the suffix is *ngu*.

to swim *junn-*
 ⇒ *swimmer junnungu*

to sleep *tarr-*
 ⇒ *sleeper tarrangu*

4. Pronouns

Pronouns behave almost exactly like nouns, with one exception: indefinite and demonstrative pronouns do not decline for case.

4.1 Personal

Personal pronouns differ in three dimensions: person, plural, and gender. All decline in the same way as regular nouns to indicate case. The following tables list the pronouns:

	singular	dual	plural
1st person	jana	janna	juu
2nd person	kurru	kunii	kurlu
3rd person	nnarta	nnaja	nni

Table 4.1: Child Personal Pronouns

When speaking of a mob's elders, a personal pronoun is never used. The elder is always referred to by their honorific title.

	singular	dual	plural
1st person	wa	ja	waya
2nd person	ku	kuna	kuu
3rd person	nna	nnara	nnaa

Table 4.2: Adult Personal Pronouns

	singular	dual	plural
3rd person	nnu	nnuka	nnunnu

Table 4.3: Inanimate Personal Pronouns

4.2 Possessive

Possessive pronouns are formed through a suffix placed on the relevant personal pronoun, but only for the child and adult genders. For possession by elders, see ???. Inanimate objects cannot be possessive. For a child, the suffix is *ra* in first and second person and *raa* in third person. For an adult, the suffix is *lu* for all persons.

4.3 Interrogative

The interrogative pronouns are strongly affected by case, particularly in the case of location and time. The basic pronouns are detailed in the following table:

meaning	word
where	kiru
when	tuu
who, what	pīi
how	piima
why	wiirtak
how many	kirta

Table 4.4: Interrogative Pronouns

It is interesting to note that “how” is the same as “what” placed in the instrumental case. The orientative and revertive cases can be applied to *kiru* (“where”), forming *kirurni* (“whither/to where”) and *kirunga* (“whence/from where”), as well as to *tuu* (“when”), forming *tuurni* (“to when”) and *tuunga* (“from when”).

4.4 Demonstrative

One set of demonstrative pronouns covers both proximal and distal objects. Distinctions can be made in some cases between both gender and number. The pronouns are found in the following table:

meaning	singular	dual	plural
there	naarla	naarla	naarla
then	yaji	yaji	yaji
that (animate)	yanna	yannara	yannaa
that (inanimate)	yannu	yannuka	yannunnu

Table 4.5: Demonstrative Pronouns

Again, the pronouns *naarla* and *yaji* can assume the orientative and revertive cases.

4.5 Indefinite

The regular indefinite pronouns are formed through modifying the interrogative pronouns by appending the correct word, representing number. These words are listed in the following table:

number	word
none	nnayi
singular	junga
dual	marri
plural	munaa
all	nnaya

Table 4.6: Indefinite Pronouns

For example, “everyone” would be expressed as *pii-nnaya* and “some two locations” as *kiru-marri*.

5. Syntax

5.1 Alignment

The alignment of Ngujari depends on whether the noun in question is an animate pronoun or not. For clauses with exclusively animate pronouns, the alignment is nominative-accusative, but otherwise it is ergative-nominative (i.e. the transitive patient and intransitive object are marked nominative and the transitive agent is marked ergative). This system applies only to intransitive and transitive verbs. For higher valencies, formed through ??, the extra arguments are assigned cases semantically.

5.2 Verb Phrases

Definition 5.2.1 — Verb Phrase.

VP = AUX [NEG] NP(s) [ADV(s)] [VAL] V

Verb phrases can be as simple as a single avalent verb, such as in “it’s raining”, or as complex as a tetravalent causative.

In the prototypical verb clause, the following rules govern word order:

1. The verb's auxiliary appears at the beginning.
2. The verb itself appears at the end.
3. Valence modifiers appear immediately before the verb.

The following examples illustrate basic verb phrases:

k-i wa-j kurru-l ji wurr-u-ø.
 strike.AUX-PRES 1S-NOM 2S-ACC 0.VAL.2 electrically.storm-AN-1ST
I strike you.

wann-uma maaju-maaju-j ka jinn-u-m.
 see.AUX-PST kangaroo-PL-NOM 2.VAL.1 eat-AN-3RD
The kangaroos ate/were eating.

Noun phrases tend to appear in order of importance to the statement as judged by the speaker.

5.3 Noun Phrases

Definition 5.3.1 — Verb Phrase.

NP = [ADJ(s)-ATTR] N [REL(s)]

A noun phrase consists of one noun, declined by case, and any number of adjectives and relative clauses. The noun tends to be placed first, followed by adjectives, although this can be inverted or even mixed according to pragmatic considerations. However, relative clauses always succeed the noun and adjectives.

birru-ø birruku miinna
 sea-ERG blue big
vast blue sea

kanaama yirlirna-j gu
 woven basket-NOM small
small woven basket

5.4 Relative Clauses

Definition 5.4.1 — Relative Clause.

VP = AUX [NEG] NP(s) [ADV(s)] [VAL] v
 \Rightarrow RC = AUX [NEG] v [VAL] [ADV(s)] NP(s)

Relative clauses are *adjoined* to the noun phrase. The clause undergoes a transformation from the standard verb phrase by moving the verb to the position immediately following the auxiliary. The valency modifier is free to be placed

anywhere among the remaining noun phrases and adverbs, but typically follows the verb.

If the head noun is a patient of the relative clause, the verb of the relative clause has its valence reduced by one.

wiingu-ø k-a pirr-u-ø ka wa-j
 man-ERG AUX-PST see-AN-1ST 2.VAL.1 1s-NOM
the man that I saw

If the head noun is the agent, a pronoun is used inside the relative clause to refer back to it.

j-a Wuurna-ø nn-uuki-ti yann-u-mi nna-j jurlu-l
 say.AUX-PST Wuurna-ERG AUX-FUT-DUB catch-AN-3RD 3s-NOM turtle-ACC

wa-j ka naj-u-m
 1s-NOM 3.VAL.2 say-AN-3RD
Wuurna, who might catch a turtle, spoke to me.

5.4.1 Adverbial Phrases

Temporal adverbs, which specify the time an action takes place, tend to appear following the noun.

k-a jana-ø jari-rn wiirr-uu-ø yuurli-rna ma
 go.AUX-PST 1s.CH-ERG beach-LOC go-CH-1ST day-REV one
Yesterday, I [a child] went to the beach.

Manner adverbs, which specify the manner in which the action was conducted, usually appear directly before the noun.

nn-uuki-yii waya-ø pirwa-pirwa-j garrna gann-u-ø
 pickup.AUX-FUT-WIMP 1PL-ERG clothing-PL-NOM quickly pickup-AN-1ST
We should pick up the clothes quickly.

However, both can occupy different positions inside the verb phrase if the speaker desires it.

5.5 Predicates

There are three cases for predicates: adjectival, nominal, and locational.

In an adjectival predicative phrase a verb is not normally required. The noun is assigned the same tense as it would be were it the argument to an intransitive verb, while the adjective assumes its predicative inflection.

puurna-j birruku-ku

sky-NOM blue-AN

The sky is blue.

The adjectival predicative can be counter-intuitively used with a noun, by placing the noun into the comitative case. This is usually employed when describing a changeable state.

murta-j gurlu-yi

berry-NOM freshness-COM

The berry is fresh.

In a nominal predicative phrase, the verb “to be” is used. The predicate noun is declined as verb’s object.

ngarr-i wa-ø gajangu-j ngurr-u-ø

be.AUX-PRES 1S-ERG teacher be-AN-1ST

I am a teacher.

In a locational predicative phrase, the verb “to be” is still used, but the predicate location is declined in the locative case.

k-i wurlki-ø kirujunga-ø ngurr-a-m

be.AUX-PRES village-ERG somewhere-LOC be-INAN-3RD

The village is somewhere.

5.6 Possession

5.6.1 Alienable

To indicate alienable possession (possession that is not permanent or subject to change), the locative case is used in conjunction with the verb “to be”. The possessed noun appears in the locative case as the subject of the transitive form of “to be”, with the possessor appearing as the object in the usual case.

ngarr-i mulu-mulu-ka-rn mungu-j ngurr-a-m
 be.AUX-PRES deadfish-PL-DUAL-LOC woman-NOM be-INAN-3RD
The woman has two dead fish.

5.6.2 Inalienable

Inalienable possession (possession that is unequivocal) is indicated simply through the use of the verb “to have”.

garr-aa-nga ngungu-j jarta-l ka gurr-u-ø
 have.AUX-FUT-GNO mob-NOM homeland-ACC 3.VAL.2 have-AN-1ST
Our mob will always have a homeland.

5.6.3 Pronominal

A noun phrase can be indicated as possessed through the use of a possessive pronoun as an adjective.

nn-uma nnaa-ø waju-j yurni nna-lu giinn-u-m
 admire.AUX-PST 3PL.AN-ERG face-NOM beautiful 3S.AN-POS admire-AN-3RD
They admired his beautiful face.

In Ngjari culture, an object can be owned by a mob as a whole. Only inanimate objects may be possessed by a mob (with the exception of areas of land). Possession is indicated by the particle *tuu*, which appears before the noun. To specify the possessing mob, the mob’s name is placed immediately after the particle. The regular name is used by members of the possessing mob, but the honorific name is used for possessions of others. For example, the particle for something owned by the Wujanga mob would be *tuu-Wujanga* for a member or *tuu-Wujarra* for an outsider.

nn-i-ju waya-ø tuu-Gurnu jaku nnal-u-j
 protect.AUX-STRIMP 1PL-ERG POS-Gurnu precious land-NOM

muu-ma naa tinn-u-ø
 spirit-INST 2.VAL.3 protect-AN-1ST
We must protect our [the Gurnu mob’s] precious land with vigour.

5.7 Verbal Constructions

5.7.1 Interrogative

Polar Questions

Polar questions are syntactically the same as a factual statement, except they are expressed with a rising tone at the beginning of the question.

nn-uuki kupa-kupa-ø gaypa-gaypa-rn narnn-u-m?
 ↗fly.AUX-FUT bird-PL-ERG mountain-PL-LOC fly-AN-3RD
Will the birds fly to the mountains?

Non-Polar Questions

One way of forming a non-polar question is using an interrogative pronoun as a verb's argument, with no syntactic change taking place.

kiru ngarr-i wumpa-j j-i palyaj-a-m nnu-ø
 where be.AUX-PRS path-NOM leadto.AUX-PRS leadto-INAN-3RD 3S.INAN-ERG
wurlki-j ngurr-a-m
 village-NOM be-INAN-3RD
Where is the path that leads to the village?

To question a certain word in a statement, the particle *yuu* can be placed before the word.

k-aa yuu-nnara-ø nurtwu-j panwa-rnu mirr-uu-m
 bring.AUX-FUT INT-3DUAL.AN-ERG food-NOM fire-ORI bring-CH-3RD
*Will **those two children** bring the food to the fire?*
nn-i wa-ø yuu-gurlurni parnti-j jinn-u-mi
 eat.AUX-PRES 3S-ERG INT-fresh kangaroo meat-NOM eat-AN-3RD
*Is he eating **fresh** kangaroo meat?*

5.7.2 Comparative

Ngujari contains locational-type comparatives. This means that the *standard* noun, or the noun to be judged against, is marked in the reveritive case. Comparatives do not use a verb, and are always positive (i.e. more adjective than the standard). The adjective is in the predicative inflection.

nna-j wa-rna yam-u

3S-NOM 1S-REV tall-AN

He is taller than me.

For comparatives in relative clauses, the adjective is fronted and is followed by the arguments.

k-a nnalji-ø junn-u nna-ø wiinguurki-rna

win.AUX-PST dingo-ERG fast-AN 3S-ERG boy-REV

yuki-j ka giirr-u-m

race-NOM 2.VAL.1 win-AN-3RD

The dingo, who is faster than the boy, won the race.

5.7.3 Conditional

There are two types of conditionals: implicative and predictive. The protasis (condition) and apodosis (outcome) are modified in different ways.

implicative The conditional is a universal truth. Whenever the condition is true, the outcome is also true.

predictive The conditional is a prediction. If the condition occurs, the outcome will occur.

To form both conditionals, the condition verb phrase appears first, followed immediately by the outcome verb phrase. There is no morpheme with equivalent meaning to “if”. However, the outcome is always placed in the subjunctive mood and the present tense.

In an implicative conditional, the condition is given the gnomic mood. The statement must therefore follow the usual rules of the gnomic, in that it must state an undisputable truth. The condition is always in the present tense.

k-i-nga kunii-ø mu-rn naa yarr-uu-n

fall.AUX-PRS-GNO 2DUAL.CH-ERG water-LOC 1.VAL.2 fall-CH-2ND

j-i-tirlu kunii-j ka mulj-awuu-n

wet.AUX-PRS-SBJV 2DUAL-CH-NOM 2.VAL.1 wet-CH-2ND

If you two fall in the water, you will both get wet.

In a predictive conditional, the condition is usually not given a mood. However, if the phrase is counterfactual, in that the condition is not seen as likely, the condition occurs in the dubitative mood. Usually, the condition will be in the

future tense.

nn-uuki palwuuwa-j ka girnn-aa-mi k-i
 break.AUX-FUT branch-NOM 2.VAL.1 break-INAN-3RD strike.AUX-PRES

yannu-ø nna-j ji wurr-a-rn
 DEM.SG.INAN-ERG 3S-AN-NOM 0.VAL.2 strike-INAN-3RD
If that branch breaks, it will strike him.

k-aa-tila nna-ø maaju-j yirn parr-u-m
 hunt.AUX-FUT-DUB 3S-AN-ERG kangaroo-NOM completely hunt-AN-3RD

ngarr-tiru nurtwa-nurtwa-rn yuni waya-j ngurr-a-m
 be.AUX-SUBJ food-PL-LOC lots 1PL-NOM be-INAN-3RD
If he were to successfully hunt the kangaroo [unlikely], we would have lots of food.

5.7.4 Negative

There are two types of negation: clausal, where the entire clause is negated, and constituent, where one noun is negated.

The formation of the clausal negative requires the negative particle that corresponds to the class of the clause's verb. In a standard negative clause, the particle follows the verb's auxiliary. However, in imperative clauses it precedes the auxiliary. Qualifiers such as “never” are used following the sentence, as stand-alone utterances.

k-a tu nna-ø naarla wiirr-u-m
 go.AUX-PST NEG 3S-AN-ERG there go-AN-3RD
He didn't go there.

ti j-i-yuu ku-j waa yanj-awu-n. wulnni
 NEG steal.AUX-STRIMP 2S-NOM 3.VAL.1 steal-AN-2ND. never
You must never steal.

The constituent negative is applicable to clauses using the verb “to have”. It is formed using the special argument *tunna* in the comitative slot of the verb.

rr-i gunnari-ø guwa-guwa-j tunna gurr-a-m
 have.AUX-PRS tree-ERG leaf-PL-NOM none have-INAN-3RD
The tree doesn't have any leaves.

5.7.5 Reflexive/Reciprocal

In reflexive clauses, the personal pronoun of the subject simply occupies the object position in the usual case. However, the valence of the verb must be decreased by one.

k-i Paya-ø nna-j ka tiirr-u-m
 carefor.AUX-PRS Paya-ERG 3S.AN-NOM 2.VAL.1 carefor-AN-3RD
Paya cares for himself.

If the clause is reciprocal, which applies only to plural subjects, the personal pronoun is still used except it takes the comitative case. The valence is also still decreased by one.

k-arlu kuu-j kuu-yi ka pirr-u-n
 see.AUX-REM 2PL-NOM 2PL-COM 2.VAL.1 see-AN-2ND
You [plural] used to see each other.

5.8 Gerunds

The gerund of a verb serves two purposes. It can act in a way similar to the English gerund, where the verb is used as a noun, or in a way similar to an infinitive, meaning roughly “in order to”.

The gerund is formed through nominalising the verb. The last vowel of the verb is simply appended as a suffix.

When used in the nominal form, the gerund takes the appropriate noun case.

k-arlu wa-j junnu yuurr-u-ø
 like.AUX-REM 1S-NOM swim.GER like-AN-1ST
I used to like swimming.

In the infinitive form, the gerund is placed before the verb's auxiliary.

parra k-a nni-j naarla wiirr-u-m
 hunt.GER go.AUX-PST 3S.AN-NOM there go-AN-3RD
He went there to hunt.

5.9 Causatives

There are two forms of the causative. The first occurs when a single noun is responsible for causing a verb phrase to occur. In this case, the comitative causative is used. However, if an entire verb phrase is responsible, the subjunctive purposive is used.

5.9.1 Comitative Causative

In the comitative causative, an extra argument is added to the verb phrase without modifying the valence. The argument is the causer, and takes the former subject's form (be it nominative or ergative). The causee, or the argument which was formerly the subject, then takes the comitative case instead. The verb remains in agreement with the former subject.

j-a turrayi-j mu nnij-a-m
 capsize.AUX-PST canoe-NOM capsize-INAN-3RD
The canoe capsized.

j-a turrayi-yi nna-j mu nnij-a-m
 capsize.AUX-PST canoe-COM 3S.AN-NOM capsize-INAN-3RD
He caused the canoe to capsize.

k-a wa-ø wuta-j walu gukarr-u-ø
 drop.AUX-PST 1S-ERG axe-NOM my drop-AN-1ST
I dropped my axe.

k-a wa-yi wuta-j walu gaju-ø gukarr-u-ø
 drop.AUX-PST 1S-COM axe-NOM my wind-ERG drop-AN-1ST
The wind caused me to drop my axe.

5.9.2 Subjunctive Purposive

The subjunctive purposive is formed through the use of the verb *nnurr* “to effect”. The auxiliary, *nnarr* takes the present tense, and begins the sentence. The verb itself is not required, but it still takes two verb phrases as arguments. The verb phrase causing the other assumes its usual tense and mood, but the caused action becomes present and subjunctive.

nnarr-i k-a nna-ø naarla wiirr-u-m
 effect.AUX-PRS go.AUX-PST 3S.AN-ERG there go-AN-3RD

j-i-tirlu wa-j nna-l nnurr-u-ø
 follow.AUX-PRS-SBJV 1S-NOM 3S-AN-ACC follow-AN-1ST
He went there, so I followed him.

5.10 Subjunctive

5.10.1 Desires

To express desires, a “wanting” verb is used, such as “to dream”, along with a verb phrase in the subjunctive expressing the desired action. The action can be in any tense.

nn-i wa-j j-a-tirlu ti nna-j ngarj-awu-m
 wish.AUX-PRS 1S-NOM hurt.AUX-PST-SBJV NEG 3S.AN-NOM hurt-AN-3RD

mann-u-ø
 wish-AN-1ST
I wish that he hadn't hurt himself

5.10.2 Speculation

If the speaker is speaking hypothetically about a situation, the subjunctive can be used. In this case, the verb “to be” would be used with a predicate adjective rather than the verbless construction.

ngarr-aa-tilu parra-ø kurlu-j tuwilwa-wa ka ngurr-a-m
 be.AUX-FUT-SBJV hunt-ERG thing-NOM dangerous-IN 2.VAL.1 be-INAN-3RD
The [prospective] hunt would be very dangerous.



Meaning

6	Semantics	47
6.1	Numbers	
6.2	Colours	
6.3	Kinship	

6. Semantics

6.1 Numbers

The number system of Ngujari is built around a dual decimal-quinary system involving the ten basic numerals which are outlined in the table below.

numeral	word	numeral	word
0	nart		
1	naju	6	nalwi
2	guu	7	puwa
3	naa	8	tuja
4	jaru	9	jawu
5	yi	10	najuyi

Expressing numbers is simple for those under ten: the corresponding numeral is used. Past ten, the base system begins to see use. Any numeral can be combined with the words *yi* (“five”) or *najuyi* (“ten”) to multiply that number. Large numbers are formed through multiples of five and ten as well as extra numerals, which follow the multiples. There are two simple ways of expressing any number, depending on the choice of five or ten as a base, but bases can be combined in

any number of ways.

twelve	twenty-three	fifty
<i>najuyi guu</i>	<i>guu-najuyi naa</i>	<i>yi-najuyi</i>
<i>guu-yi guu</i>	<i>jaru-yi naa</i>	<i>najuyi-yi</i>
	<i>najuyi guu-yi naa</i>	

When counting, a separate tally system can optionally be used. “Marks”, or chosen multiples of five or ten, are expressed fully, but numbers in between are expressed as the difference from the last mark. The following example shows a speaker using this system:

guu-najuyi, naju, guu, naa, jaru, yi-yi, naju...

twenty, twenty-one, twenty-two, twenty-three, twenty-four, twenty-five, twenty-six...

6.2 Colours

In Ngujari, colours are derived from nouns through the suffix “ku”. There are six primary colours, detailed in the following table, along with their base noun.

colour	word	noun	meaning
black	nguku	ngu	person
white	tumwaku	tumwa	sand
red	wirraku	wirra	blood
green	nurku	nurli	seaweed
yellow	puuki	puu	sun

Additional colours can be formed either through compounding or modifying a new noun. All colours can be joined with others to form compounds.

black <i>nguku</i>	sunset <i>kii</i>
white <i>tumwaku</i>	⇒ orange <i>kiiku</i>
⇒ grey <i>nguku-tumwaku</i>	

6.3 Kinship

The kinship system of Ngujari revolves around four *totems*. The population is split into four: *Bilru* (‘the seal’, the black wallaby, the platypus, and the satin bowerbird. People of each can more easily utilise the magic of a single *Nnurru*, and may have access to exclusive techniques. The pattern of totem inheritance

is rigid but simple, with a woman of a specific totem obliged to partner with a man of another prescribed totem to produce offspring of an entirely different totem. However, the inheritance is ultimately cyclic.

Man	Woman	Offspring	---- ---- ----	Seal	Wallaby	Platypus
Wallaby	Seal	Bowerbird	Bowerbird	Platypus	Wallaby	Platypus
Bowerbird	Seal					

In Ngujari stories, magic is said to come from the four brothers who discovered the land they now occupy: Bilru, the Seal; Gunya, the Wallaby; Juunwi, the Bowerbird; and Pilkiya, the Platypus. The four brothers made their homes in the environments most suited for their physiology. Bilru constructed his on a rock formation near the coast, allowing him to spend his days swimming in the ocean. Gunya settled in the low-lying area next to the beach, where he could find plenty of food to eat. Juunwi made his home high in the mountains, where he could soar above the treetops and find beautiful objects to decorate his home. Pilkiya chose a river that cut through the mountain, so he could enjoy the water and travel around the whole of the area.



Lexicon

Bibliography	55
Books	
Articles	

A

kujari [kuʒa.ɽi] *na* Southern Cassowary; (*fig*) a person prone to listlessness



The Southern Cassowary is seen as untamable and always in control. However, it seems to have no definite plans and spends its time wandering aimlessly. This sentiment can be applied to people.

wurr [wuɾ] *v* (0) it is electrically storming, there is lightning; (1) to be struck by lightning; (2) to strike



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