CHAPTER 6
VERB MORPHOLOGY

The discussion of verb morphology presented in this chapter is based on the assumption of a distinction between inflectional and derivational suffixes. The latter class includes those morphemes which have a lexeme-deriving function and produce new verb stems of a particular conjugation class. Where the stem is already verbal, the new stem may be of a different conjugation class. Those derivational suffixes which derive verbs from nominals or nominal expressions are also discussed in this chapter. Inflectional suffixes, on the other hand, comprise a conjugation-determined set of final suffixes which encode categories of tense, aspect, mood, voice and type of clause-linkage.

6.1 OVERVIEW

6.1.1 INFLECTIONAL CATEGORIES

A distinction can be made between inflections which occur only in subordinate clauses and those which occur in main clauses. The former set includes the present relative, contemporaneous relative and sequential relative clause inflections, the lest clause inflections and the purpose inflections (which are marked for switch-reference). A full description of the subordinate clause inflections is left until the discussion of complex sentences in Chapter 10. With the exception of the imperative and present tense, all other inflections can occur in subordinate clauses functioning as finite relative clauses.

There is a passive verb form corresponding to each active verb form, excepting the imperative (but see discussion of imperative clauses in §9.8). Passive verbs involve either the addition of the active inflectional suffixes to a derived passive verb stem, or a special portmanteau passive tense or mood inflection. Special passive inflections correspond to the active past, counterfactual and lest inflections. There is surprisingly little additional semantic difference associated with the voice oppositions. The passive perfective carries a greater implication of a successfully completed action than its active past tense counterpart but there are no restrictions on the appearance of an agent in passive clauses of this type. The passive counterfactual and lest inflections are rarely used and appear to be no different in meaning from the preferred derived passive verbs bearing the corresponding active inflections. The most likely explanation here is that the inflectional passive forms are gradually being replaced by forms based on derived passive stems.

The habitual nominalising suffix is historically related to the passive derivational suffix. Although essentially a nominalising suffix it may still, albeit very rarely, take complements and adjuncts, including an agent. Derived passive verbs bearing the active habitual inflection are preferred in more fully elaborated clauses.

Martuthunira has a three-way tense distinction defined by the past, present and future inflections. Aspect is not an important verbal category in Martuthunira although unmarked aspectual readings are implied by all verb inflections. With the exception of the imperfective present tense, subordinate relative, and habitual inflections, all other verbal categories are essentially perfective. Other syntactic devices, such as the use of copulas (§9.3) and temporal nominals and clitics, conspire to provide additional aspectual specification of events.

Finally, the imperative, counterfactual and unrealised inflections can be described as moods. The imperative mood presents the illocutionary force of a command. Both the counterfactual and unrealised inflections are irrealis moods. The unrealised verb describes a strongly predicted action or event which did not happen, is not happening or will not happen. The counterfactual similarly describes an action or event which was not realised but which might have been if things had been different. Although described and labelled as a tense, the future has an important modal component. It often functions as a mild imperative or hortative, or describes an action which is an expected and/or customary outcome of some situation.

6.1.2 DERIVATIONAL CATEGORIES

Derivational suffixes are divided into two distinct classes: those which attach to a verb stem and derive a new verb stem, and those which derive verbs from nominals and nominal expressions. The first class includes the passive derivational suffix and the collective suffix. The second class includes the inchoative and causative suffixes which derive mainly intransitive and transitive verbs respectively. In addition there are a number of minor derivational suffixes of restricted productivity.

The data suggest a dependence on productive verbal derivational processes rather than on a large store of verb lexemes, but it is difficult to know to what extent this is an artefact of the investigation. The great frequency, in text, of verbs derived by the simple inchoative and causative suffixes may in part be due to the last speaker's loss of verb lexemes. The productive verbalisation processes allow verbs to be built out of the nominals and nominal phrases already introduced in a text. For the last speaker of a language the use of such derived verbs is possibly an easier option than searching memory for an elusive lexeme.

6.1.3 TRANSITIVITY AND CONJUGATION CLASSES

In most Australian languages transitivity is an important grammatical category. Verbs are usually strictly transitive or intransitive and syntactic processes may be sensitive to the difference between transitive and intransitive clauses (see Dixon 1980:378). The relative importance of transitivity in many Australian languages may be directly related to patterns of morphological ergativity. In an ergative language, the transitivity of a predicate (and similarly a clause) is clearly recognisable from the case-marking of its arguments. However, in languages with an accusative pattern of case-marking, such as the Ngayarda languages and the Tangkic languages of the Gulf of Carpentaria (Evans 1985), transitivity contrasts are not so explicitly conveyed by case-marking options and the category of transitivity assumes much less importance in the overall grammar of the language. The difficulty in distinguishing transitive from intransitive predicates in Martuthunira is a result of the following factors:

1. Transitive and intransitive subjects are indistinguishable – both are unmarked nominative.
2. Arguments (including both subject and object) may be freely omitted when understood from context or when already established in previous text.
3. Many motion verbs have alternate case frames in which locational complements can appear as accusative marked objects.
4. Accusative arguments denoting beneficiaries may be freely added to many clause types.

The addition of accusative arguments to a clause was noted in §4.3 and is discussed further in §9.5.9. Although the presence of an accusative beneficiary argument in a clause attests to the transitivity of that clause, it cannot be considered diagnostic evidence of the categorial transitivity of the predicate in that clause.

Verbs with alternate case frames are more problematic. There is no doubt that these verbs must be subcategorised for the locational argument that may appear as an accusative object. However, the verbs most often occur in intransitive clauses. Here I will assume that the optional accusative locational complement not be considered for the purposes of ascribing a predicate to a transitivity class. Thus the class of intransitive verbs includes statives like *nyina*-Ø 'sit' and motion verbs such as *puni*-Ø 'go' and *kanarri*-Ø 'come', some of which may take an accusative argument denoting a locational role. The class of transitive verbs includes the simple transitive verbs of affect, such as *thani*-L 'hit', which are always understood as having an object, perception verbs such as *nhawu*-Ø 'see', and induced motion verbs such as *warntitha*-R 'drop, throw', which may take a second accusative argument denoting a locational role. There is also a small number of ditransitive verbs including *yungku*-Ø 'give' and *nhuura-ma*-L 'teach, show'. There remains a small set of verbs, such as *ngaya*-Ø 'cry (for)', which may take an accusative argument but which, if no such argument appears, are not understood as implying this argument. These can be described as 'ambitransitive' verbs (cf. Dench 1991:167).

Verbs are strictly categorised into one of three conjugation classes labelled Ø, L and R for the conjugation markers which appear in some verb inflections. Membership of a conjugation determines the choice of inflectional and derivational suffix form. In common with the other Ngayarda languages, Martuthunira has reduced an earlier conjugation system by the incorporation of monosyllabic verbs into the open conjugation classes. However, this incorporation is not complete.

Four monomorphemic verbs of the Ø-conjugation, *yungku*-Ø 'give', *kangku*-Ø 'take, carry', *manku*-Ø 'grab, pick up', and *nhawu*-Ø 'see', select special forms of the 'unrealised' verb inflection and the 'collective' derivational suffix. The same pattern applies for verbs involving the *-:ngku*-Ø derivational suffix (§6.3.9), strongly suggesting that the verbaliser was originally a separate verb. The four mono-morphemic verbs all descend from the future forms of monosyllabic verbs of an original NG/M-conjugation (see Dixon 1980:403-405) and this group is thus described as the NG-subconjugation of the Ø-conjugation.

In all of the Ngayarda languages the R-conjugation has a very limited number of members and there are suggestions that it is, by degrees, being incorporated into the open L-conjugation. In Panyjima this incorporation is complete. In Martuthunira, the remaining R-conjugation verbs often take L-conjugation inflectional forms even though special R-conjugation forms exist. The surviving R-conjugation verbs are:

wantha-R	place, put, leave
patha-R	blow (of wind), hit (with thrown implement), spin (hair)
warntitha-R	throw
kanyja-R	keep, hold

There is a correlation between conjugation membership and transitivity with the Ø-conjugation including mainly intransitive verbs and the L-conjugation including mainly transitive verbs. Table 6.1 gives the numbers of transitive and intransitive verbs for the two major conjugations, based on a sample of 134 monomorphemic verb roots. All four R-conjugation verbs are transitive.

TABLE 6.1: CONJUGATION MEMBERSHIP BY TRANSITIVITY CLASS

	Intransitive	Transitive
L-conjugation	20	63
Ø-conjugation	38	13
TOTAL	58	76

A few verb roots appear in both conjugations but with a corresponding difference in meaning:

kampa-L	cook, burn	*kampa-Ø*	be burning, cooking
thurnta-L	rub, paint	*thurnta-Ø*	rub self, paint self
puntha-L	wash, bathe	*puntha-Ø*	wash, bathe self
yinka-L	chisel	*yinka-Ø*	thrust body (during intercourse)
tharrwi-L	put into	*tharrwi-Ø*	put on (clothes)

The L-conjugation forms are transitive, the corresponding intransitive Ø-conjugation forms are inherently reflexive. This alternation does not occur with any derived verb stems.

6.1.4 INFLECTIONAL SUFFIX FORMS

Table 6.2 lists the forms of the main clause and subordinate clause verb inflections for the three conjugations.

TABLE 6.2: VERB INFLECTIONS

	Ø	L	R
MAIN CLAUSE			
Present	*-nguru*	*-rnuru*	*-rnuru*
Past	*-lha*	*-lalha*	*-rralha*
Passive perfective	*-yangu*	*-rnu*	*-rnu*
Future	*-layi*	*-rninyji*	*-rninyji*
Imperative	*-Ø*	*-l.yu*	*-rryu*
Habitual	*-wayara*	*-lwayara*	*-rrwayara*
Habitual nominalisation	*-nguntharri*	*-nngguntharri*	*-rrnguntharri*
Unrealised	*-yaangu*	*-laangu/-raangu*	*-rraangu*
Counterfactual	*-marni*	*-nmarni*	*-nmarni*
Passive counterfactual	*-ngulaanu*	*-nngulaanu*	*-rrngulaanu*

SUBORDINATE CLAUSE			
Present relative	*-nyila*	*-rnura*	*-rnura*
Contemporaneous relative	*-rra*	*-l.yarra*	*-rryarra*
Sequential relative	*-rrawaara*	*-l.yarrawaara*	*-rryarrawaara*
Lest	*-wirri*	*-lwirri*	*-rrwirri*
Passive lest	–	*-rniyangu*	*-rniyangu*
Purpose same-subject	*-lu*	*-ru*	*-ru*
Purpose subject=object	*-waa*	*-lwaa*	*-rrwaa*
Purpose different-subject	*-wala*	*-lwala*	*-rrwala*

Two classes of inflectional forms can be described on the basis of this table. First, a number of inflections involve an invariant suffix form following a conjugation marker (CM); -Ø-, *-l-* or *-rr-*. These are:

Habitual	-CM-*wayara*
Lest	-CM-*wirri*
Purpose subject=object	-CM-*waa*
Purpose different-subject	-CM-*wala*
Past	-CM-*a-lha*

The L and R-conjugation forms of the past tense inflection involve a vowel *a* following the conjugation marker and preceding the invariant suffix *-lha.* The 'unrealised' inflection also involves the L and R-conjugation markers, with the Ø-conjugation form suggesting a conjugation marker *-y-*. The *-raangu* allomorph is selected by verbs of the NG-subconjugation. The counterfactual, passive counterfactual and habitual nominalisation inflections are also included in this first class. For these suffixes the invariant form follows an assimilated *-n-* conjugation marker in the L-conjugation:

Counterfactual	*-n-marni*
Passive counterfactual	*-n-ngulaanu*
Habitual nominalisation	*-n-nguntharri*

The imperative and the contemporaneous relative inflections can be added to this class. The two suffixes can be reconstructed as follows:

Imperative	*-CM-*ku*
Contemporaneous relative	*-CM-*karra*

Both suffixes have clear cognates in other languages of the area. The *-CM-*ku* suffix appears as the present tense inflection in the other Ngayarda languages and is ultimately related to a common future/purposive suffix. In the Ø-conjugation phonological changes have erased the suffix completely, leaving the bare stem as the imperative form of the verb. The same loss has occurred in Yinyjiparnti in which the present tense suffix is *-Ø* for Ø-conjugation verbs and *-ku* for L, R and N-conjugations.

The *-CM-*karra* suffix functions as the marker of same-subject relative clauses in the Kanyara languages. Thalanyji (Austin 1981d) has L and R-conjugation forms *-lkarra* and *-rrkarra* respectively, and Y-conjugation forms *-yarra* on stems with a final *a* vowel and *-rra* on stems with final *i* or *u*. The Martuthunira Ø-conjugation form of the contemporaneous relative is similarly *-rra* on stems with final *i* or *u*. The *a* vowel of *a*-final stems is replaced

with *i* when the suffix *-rra* is attached (§2.5.4). In some environments the *-rra* suffix collapses with a final *rri* syllable of a Ø-conjugation verb. For example, the verb *pamararri-Ø* 'call out to' appears as *pamararra* in contemporaneous relative clauses.

pamararri-rra	*pamararra*
call out-CTEMP	

The same reduction occurs in verbs involving the collective derivational suffix (§6.1.5). The sequential relative inflection is apparently built on the contemporaneous inflection by the addition of a suffix *-waara*. This suffix occurs nowhere else in Martuthunira and to date I have found no historical source. Austin (1981d:219) describes a Thalanyji "preparatory" clause inflection -CM-*kurrara* which appears to be cognate with the Martuthunira sequential inflection but which is not so obviously related to the Thalanyji relative same-subject inflection.

The second class of inflections includes those for which the L and R-conjugations share the one form while the Ø-conjugation has a different form:

	Ø	L/R
Present	*-nguru*	*-rnuru*
Passive perfective	*-yangu*	*-rnu*
Future	*-layi*	*-rninyji*
Passive lest	–	*-rniyangu*
Present relative	*-nyila*	*-rnura*
Purpose same-subject	*-lu*	*-ru*

With the exception of the purposive same-subject inflection, the L and R-conjugation forms are based on the suffix **-rnu* (with an assimilation of the vowel to /i/ preceding a palatal). The Ø-conjugation forms are not similarly related and there are few clear cognates for any of these suffixes in neighbouring languages.

The informant showed a certain degree of variation in the choice of verbal inflections of the first class for R-conjugation verbs. In many instances the L-conjugation form occurs rather than the R-conjugation form. This tendency to regularise the R-conjugation no doubt reflects the process through which the R-conjugation was lost in Panyjima. For the counterfactual inflection in Martuthunira a separate R-conjugation form appears to have already been lost.

6.1.5 DERIVATIONAL SUFFIX FORMS

The passive and collective have different forms conditioned by the conjugation membership of the stem to which they are attached. With the exception of the 'body-noise' (§6.3.6, §2.5.2) and *-:ngku-Ø* (§6.3.9, §2.5.3) verbalisers, which have phonologically conditioned allomorphs, all other derivational suffixes have invariant forms.

The passive has a basic form *-nguli-Ø* which follows the conjugation markers -Ø-, *-n-* or *-rr-*. The suffix is shortened to -CM-*ngu-* when followed by the future, contemporaneous (or sequential) relative or purposive same-subject inflections (§2.5.5).

nguli-layi	→	*-ngulayi*
nguli-rrai	→	*-ngurra*
nguli-lui	→	*-ngulu*

The passive can also be recognised as historically involved in the passive counterfactual and habitual nominalisation inflections, and the lest inflection has taken the first step towards incorporation with the passive derivational suffix. Following the passive, the suffix has the form *-yirri* rather than the general Ø-conjugation form *-wirri* and the combination is further reduced in fast speech to *-nguliirri.*

The collective suffix has three separate forms conditioned by the conjugation membership and the length of the verb stem (§2.5.1). The distribution of the forms is set out in Table 6.3:

TABLE 6.3: COLLECTIVE SUFFIX FORMS

	Ø	NG-sub	L	R
dimoric stem	*-marri*	*-yarri*	*-yarri*	*-yarri*
other	*-marri*	*-marri*	*-lwarri*	*-lwarri*

The *-marri* form of the collective suffix also appears on nominal stems deriving a collective verb. In all examples found so far the collective verb corresponds to a transitive verb derived by the addition of the causative suffix *-ma*-L to the nominal stem. For example:

karlarra-marri-Ø	heat each other up
karlarra-ma-L	make hot

The simplest description of this distribution is to posit a *-rri-Ø* form of the collective suffix following the *-ma*-L causative suffix. Thus the verb 'heat each other up' can be glossed:

karlarra-ma-rri-Ø
hot-CAUS-COLL

Like the passive, collective suffix forms are reduced when followed by the contemporaneous relative inflection *-rra*. The *-rri* syllable of the collective suffix is lost:

-marri-rrai	→	*-marra*
-yarri-rrai	→	*-yarra*
-lwarri-rrai	→	*-lwarra*

The results of this reduction are most striking on verbs based on nominal stems. The *-rri-Ø* form of the collective following the causative is lost altogether:

muthumuthu-ma -rri-rra	→	*muthumuthu-marra*
cool-CAUS-COLL-CTEMP		cool-CAUS+COLL+CTEMP

The verb *wangka-Ø* 'say, tell' has an idiosyncratic stem *wangkarnu-Ø* selected only by the collective suffix. The normal Ø-conjugation collective suffix form *-marri* follows an apparent *-rnu* addition to the verb root. Similar idiosyncratic stem forms of this verb occur in collective (or reciprocal) forms in other languages of the area. For example:

Jiwarli	*wangkaarni-*
Yinyjiparnti	*wangkayi-*

6.2 INFLECTIONS

6.2.1 PRESENT TENSE

The present is used in simple declarative or interrogative utterances to indicate that the event or state of affairs described by the predicate is taking place at the time of speaking.

(6.1) *Jarruru-ma-l.yu warra! Nganaju malyarra-ma-rnuru paju.*
slow-CAUS-IMP CONT 1SG.ACC pain-CAUS-PRES REAL
Do it a bit slower! [You're] hurting me.

(6.2) *Kartu nhawu-nguru?*
2SG.NOM see-PRES
Do you see [them]?

The present tense may also be used for events which are not taking place at the exact time of speaking. The present may be used to indicate a speaker's immediate intentions (example (6.3)), as a direction to an addressee to perform some action in the immediate future (6.4), or to imply the continuation of an action just completed (6.5).

(6.3) *Ngayu puni-nguru-rru.*
1SG.NOM go-PRES-NOW
I'm going now.

(6.4) *Kartu puni-nguru ngurnu-mulyarra kalyarran-mulyarra manku-lu*
2SG.NOM go-PRES that.OBL-ALL tree-ALL get-PURPss

wurrulywa-a.
leaves-ACC
You go to that tree and get some leaves.

(6.5) *Wanthanha-wuyu-u kartu wangka-nguru jarru-ngku*
which-SIDE-ACC.2SG NOM say-PRES march.fly-EFF

kalya-rnu-nguru-u?
bite-PASSP-ABL-ACC
Which one of them are you saying has been bitten by a march fly?

The present is also used to express generally accepted truths, as in examples (6.6) and (6.7), or assertions of belief, as in (6.8) and (6.9).

(6.6) *Ngunhaa yakarrangu karlwa-nguru jinkayu.*
that.NOM sun rise-PRES east
The sun rises in the east. (trans.)

(6.7) *Warryumuntu wangka-nguli-nguru tharnta parla-nyungu kupuyu-marta*
mother.euro call-PASS-PRES euro hill-DWELL little-PROP

thara-ngka-marta.
pouch-LOC-PROP
Warryumuntu, that's what that hill euro with a little one in its pouch is called.

(6.8) *Ngunhu kanyara kuliyanpa-nguru nhuura paju-rru.*
that.NOM man think-PRES knowing REAL-NOW
That man thinks that he really knows [how to do it].

(6.9) *Mir.ta wiyaa thalka-nnguli-nguru,thanuwa-a maruwarla-a paju*
not maybe feed-PASS-PRES food-ACC much-ACC REAL

yungku-nguli-nguru.
give-PASS-PRES
Maybe [he] isn't fed, isn't given very much food.

In narrative text the present tense inflections most often occur on the copulas *nyina-Ø* 'sit, be', *karri-Ø* 'stand', *wanti-Ø* 'lie' and *puni-Ø* 'go, be', where these serve to establish or re-establish a narrative present (§9.3). Otherwise, present tense verbs are tied to the present of utterance. These may convey the speaker's comments on the current status of situations or participants discussed in the narrative, or may present general truths.

6.2.2 PAST TENSE AND PASSIVE PERFECTIVE

The past tense and passive perfective inflections complement one another. Both denote events taking place at a time prior to the present of utterance but differ in voice. In addition, both inflections are usually interpreted as coding perfective aspect, although this is most marked with the passive. The following examples illustrate the suffixes in main clauses.

(6.10) *Ngawu, ngunhu nganaju mimi, ngurnaa yarna-lalha warnu*
yes that.NOM 1SG.GEN uncle that.ACC dissatisfied-PAST ASSER

ngathu yinka-rnu wirra-a. Ngunhaa wangka-lha
1SG.EFF chisel-PASSP boomerang-ACC that.ACC say-PAST

wirra-a jalya-a,ngurnta-a kuyil-yu.
boomerang-ACC rubbish-ACC style-ACC bad-ACC
Yes, that uncle of mine, he was dissatisfied with that boomerang chiselled by me. He said that the boomerang was rubbish, had bad form.

(6.11) *Ngunhaa nyina-lha jampa, wiruwarri-lha-rru, kuliyanpa-lha*
that.NOM sit-PAST moment be.homesick-PAST-NOW think-PAST

parrani-layi-rru ngurnula-ngu-mulyarra warra ngurra-mulyarra.
return-FUT-NOW that.DEF-GEN-ALL CONT camp-ALL
He stayed for a while, and got homesick now, and thought about returning to his camp.

(6.12) *Nhula muyi ngulu thani-rnu kalyaran-ta nyina-nyila-lu.*
near.you dog that.EFF hit-PASSP log-LOC sit-PrREL-EFF
That dog near you was hit by that fellow sitting on the log. (trans.)

(6.13) *Nganalu kartu yungku-yangu muyi-i?*
who.EFF 2SG.NOM give-PASSP dog-ACC
By whom were you given the dog? (trans.)

In many syntactic environments, verbs marked with the past tense and passive perfective suffixes look very like nominalisations. First, the verbs are common in reduced subordinate

clauses. These consist of just the verb word and either immediately follow the head of the noun phrase, as in examples (6.14) and (4.157), or stand in as the head of the noun phrase and bear the nominal suffixes appropriate to that noun phrase in higher constituents (as in (6.15) and (4.36)):

(6.14) *Nganarna kuliyanpa-nguru kartungu-mulyara yirla warrirti-ngara-a*
1PL.EXC think-PRES 2SG.OBL-ALL only spear-PL-ACC

wurnta-rnu-ngara-a.
break-PASSP-PL-ACC
It's only to you that we think about bringing spears that have been broken.

(6.15) *Yarta-wuyujuwayu thuulwa-rninyji waruul. Yarta-wuyu juwayu,*
other-SIDE hand.pull-FUT still other-SIDE hand

thaathu-lalha-wuyu juwayu, ngunhaa puni-layi thungku-ngka waruul.
let go-PAST-SIDE hand that.NOM go-FUT back-LOC still
One hand keeps on pulling. The other hand, the one that has let go, that one keeps moving down its back.

Second, past tense verb forms may function as stems for further verbal derivation. In the following examples the causative suffix *-ma*-L (§6.3.4) is added to an intransitive verb inflected with past tense to form an effective transitive verb, as in examples (6.16) and (6.17). In these examples the past tense inflected verb describes a resulting state into which the object of the causative verb will be placed by the actions of the subject of that verb. Similar constructions involving an inflected transitive verb were not accepted by the informant.

(6.16) *Kartu-lwa nganaju kuyil-nguli-lha-ma-lalha*
2SG.NOM-ID 1SG.ACC bad-PSYCH-PAST-CAUS-PAST

yimpala-rri-waa drunka-npa-waa.
like.that-INV-PURPs=o drunk-INCH-PURPs=o
You're the one who made me feel bad, to become like that, to get drunk. (trans.)

(6.17) *Nganarna manku-lha-nguru-rru thawun-ta-a wuruma-l.yarra*
1PL.EXC get-PAST-ABL-NOW town-LOC-ACC do.for-CTEMP

kartungu. Parrani-lha-ma-rninyji-rru kartungu-mulyarra.
2SG.ACC return-PAST-CAUS-FUT-NOW 2SG.OBL-ALL
We got the things that are in town, doing it for you. Then brought [them] back to you.

Finally, there are a few examples of idiomatic phrases involving verbs inflected with either the past tense or passive perfective suffixes which approach lexical status. These idioms all refer to particular kin relationships.

kampa-lalha burn-PAST	my mother's brother
ngathu kampa-rnu 1SG.EFF burn-PASSP	my sister's child

nganaju	*karri-lha*	my elder sister, brother
1SG.GEN	stand-PAST	
yini-ma-rnu	*kampa-rnu*	my mother's brother's son
name-CAUS-PASSP	burn-PASSP	

Despite these patterns, the past tense and passive perfective suffixes are not described here as lexical nominalisations. First, there is no strict dividing line between a fully finite clause including a past tense or passive perfective verb and one with a reduced set of arguments embedded within some other constituent. Second, there are no special case assignment rules and no semantic idiosyncracies associated with such reduced clauses.

The Martuthunira past tense essentially corresponds to both past tense and active perfective inflections in the other Ngayarda languages. Yinyjiparnti, Panyjima and Ngarluma share a past tense suffix *-nha* ~ *-rna* which indicates past action and which does not occur in subordinate clauses. In addition, each has a special 'perfective' suffix which, unlike the past tense, implies a completed action and is common in subordinate structures. The Martuthunira past tense suffix is cognate with the Panyjima perfect (see Dench 1991:172).

6.2.3 HABITUAL INFLECTIONS

The habitual inflection marks an action which is understood as occurring on a great number of occasions, so allowing the subject of the verb to be characterisable in terms of that action. The habitual covers the functions of 'usitative' verb inflections found in languages to the south of Martuthunira and has an unmarked usitative reading usually translated with the English 'used to VERB' construction.

(6.18) *Nganarna wantha-rrwayaramurla-a thana manku-wala minthalmuyi.*
1PL.EXC leave-HABIT meat-ACC let grab-PURPds alone dog
We used to leave meat so the dogs could get it themselves. (trans.)

(6.19) *Ngunhu-ngara yinka-lwayara Kawuyu-nyungu-ngara-a yinka-lwayara*
that.NOM-PL chisel-HABIT *Kawuyu*-DWELL-PL-ACC chisel-HABIT
thawu-rninyji Wirrawanti-mulyarra.
send-FUT *Wirrawanti*-ALL
They used to carve the ones [boomerangs] from *Kawuyu*, carve them and send them to *Wirrawanti.*

There is no necessary implication that the actions have taken place in the past. Very often, the action is seen as one which the subject of the verb still, and in the future, will continue to perform regularly.

(6.20) *Ngunhu kanyarathani-lwayara muyi-i thurlajinkarri-i*
that.NOM man hit-HABIT dog-ACC poor.fellow-ACC
murla-marnu-u, mir.ta nhawungarra-ma-lwayara panyu.
meat-ASSOC-ACC not look.after-CAUS-HABIT good
That man is always hitting that poor kangaroo dog, [he] doesn't look after it well.

(6.21) *Ngayu puni-lha ngurnu muyi-i kangku-rra thurla*
1SG.NOM go-PAST that.ACC dog-ACC take-CTEMP eye

parra-nnguli-wayara-a.
hit-PASS-HABIT-ACC
I went, taking that dog that's always getting left behind (lit. getting hit in the eye).

(6.22) *Nhiyu warrunparrunmir.ta kalya-lwayara, murla-a yirla*
this blowfly not bite-HABIT meat-ACC only

kunanyja-lwayara yirlirli-npa-waa.
excrete-HABIT maggot-INCH-PURPs=o
This blowfly doesn't bite, it just excretes on meat so that it gets maggoty.

The habitual allows definition of objects or persons by their characteristic activities. This is clearly demonstrated in example (6.23) in which the habitual is used in order to describe an object for which no clear Martuthunira word exists (see also (4 .87)).

(6.23) *Ngunhaa kanyja-rnu nhawani-ma-lwayara,thurlwa-nnguli-wayara,*
that.NOM keep-PASSP thing-CAUS-HABIT pull-PASS-HABIT

parrapari-marnu.Ngunhu wanti-nguru powder-marta waruul,
rifle-ASSOC that.NOM lie-PRES powder-PROP still

wanti-lha kuwarri thurlwa-rnu. Wanthala parrapari?
lie-PAST now pull-PASSP where rifle
That one was being kept, [the thing that] makes it what's-its-name, the one that gets pulled through, for a rifle. That cloth still has powder on it as if it had just been pulled through. But where's the rifle?

As an extension of this pattern some habitual verb forms have assumed full lexical status as nominals. The specific meaning of the item is often not completely predictable from the meaning of the verb stem.

kartatha-lwayara chop-HABIT	tomahawk
purra-lwayara hit-HABIT	tomahawk
yurra-lwayara dig-HABIT	yam digging stick

The habitual nominalisation inflection allows a characterisation of an entity by its typical ‘undergoing’ of the action denoted by the verb stem. Some examples are:

wayangku-nguntharri frighten-HABITNOM	cowering, fearful
mungka-nnguntharri eat-HABITNOM	‘eatables’ (generic for meat and vegetable food)
warryayi-nnguntharri drag-HABITNOM	kangaroo tail
kampa-nnguntharri cook-HABITNOM	kitchen, cookhouse

nyina-nguntharri chair, saddle
sit-HABITNOM

As the last two examples show, the referent of the nominalisation does not necessarily correspond to an object of the corresponding active verb. Nor does it necessarily correspond to a possible subject of the passive verb. *Nyina-Ø* 'sit' does not take an accusative object and does not take either the passive derivational suffix or passive inflections. Similarly, the referent of *kampanngguntharri* 'kitchen' is a location which may not appear as either an accusative object or the passive subject of *kampa*-L 'cook'. The nominalised verb may, very rarely, appear in a standard passive clause frame with a nominative subject and an effector argument denoting the agent:

(6.24) *Wanthanha-akartu wangka-nguru?*
which-ACC 2SG.NOM talk-PRES
Which one are you talking about?

Ngunhu-lwa ngaliwa-lu muyiwiya-nngguntharri.
that.NOM-ID 1PL.INC-EFF insult-HABITNOM
That one that's always being insulted by us.

6.2.4 FUTURE TENSE

The future is named for its function in the simplest conversational utterances where it contrasts with the present and past tense inflections in indicating that an event is expected to take place at some point in the future:

(6.25) *Ngaliwa wawayi-rninyji ngurnu kanyara-a.*
1PL.INC look.for-FUT that.ACC man-ACC
We'll look for that man.

(6.26) *Nhiyu ngurra ngapalapaju warnu. Wantharni-npa-layi-rru puni-rra,*
this ground mud REAL EMPH how-INCH-FUT-NOW go-CTEMP

wii tharrwa-layi ngapala-la-rru?
if go.into-FUT mud-LOC-NOW
This ground is very muddy. How are we going to get along if we get stuck in the mud?

However, the future more often functions as a relative tense marker indicating a subsequent event which, given the circumstances, is a generally expected outcome, or is customarily appropriate. Thus, in example (6.27) the future verb indicates that a spear is made after the wood is cut, but does not provide the absolute tense.

(6.27) *Nganalu nhiyaa marli wurnta-rnu warrirti-ma-nngu-layi?*
who.EFF this.NOM cadjeput cut-PASSP spear-CAUS-PASS-FUT
By whom was this cut cadjeput wood then made into a spear?

Programmatic narratives often consist of a series of future marked verbs, each of which describes the next stage in an established sequence of events. The following portion of text explaining how to cook a kangaroo is typical (example (6.28)). Future forms are underlined.

(6.28) *Ngurnaa thurlwa-rninyji karla-ngka-nguru-u. Thani-rninyji juwayu-marta.*
that.ACC pull.out-FUT fire-LOC-ABL-ACC hit-FUT hand-PROP

Palwarru ngunhaa, wurnta-rninyji-rru punga-a-rru, thurlwa-rninyji
true that.NOM cut-FUT-NOW guts-ACC-NOW pull.out-FUT

nyilyu-u. Palwarru ngunhaa, panyu-ma-rninyji-rru. Ngamari-i
stomach-ACC true that.NOM good-CAUS-FUT-NOW liver-ACC

thurlwa-rninyji. Karla-ngka-rru warntitha-rninyji, kampa-waa-rru
pull.out-FUT fire-LOC-NOW throw-FUT cook-PURPs=o-NOW

panyu-npi-rra-rru. Thurlwa-rninyji ngurnaa ngamari-i,
good-INCH-CTEMP-NOW pull.out-FUT that.ACC liver-ACC

wantha-rninyji wurrulywa-la-rru muthu-npi-rra wanti-waa.
put-FUTleaves-LOC-NOW cold-INCH-CTEMP lie-PURPs=o

Mungka-rninyji-rru muthu-npa-lha-a-rru. Parlura-rru
eat-FUT-NOW cold-INCH-PAST-ACC-NOW full-NOW

puni-layi malarnu-la-rru kartutharra wanti-lu.
go-FUT shade-LOC-NOW on.back lie-PURPss
Then [you] pull it out of the fire, and rub it down with [your] hand. Okay, now cut its guts open and pull out the stomach. Okay, fix it up. Pull out the liver and throw it in the fire to cook, become nice. Then pull out the liver and put it on some leaves to cool down. Then eat it once it's cooled down. Now that you're full, go and lie on [your] back in the shade.

Future verbs with a second person subject are usually interpreted as mild imperatives. Examples include (4.148) and (4.149), (5.4) and (5.25). The negative imperative functions of the future are illustrated here in examples (6.29) and (6.30). With a first person subject, the future often functions as a hortative, as in (4 .41), (5.55) and (5.103).

6.2.5 IMPERATIVE

Imperative verbs occur only in positive clauses. The functions of a negative imperative are assumed by negative future clauses. The following examples illustrate both positive imperative clauses, in which the verb bears the imperative inflection, and negative imperatives, involving the future inflection (and see (4.108)).

(6.29) *Purnumpuru-npa-Ø! Kartu mir.ta wurnta-rninyji nganarna-a.*
quiet-INCH-IMP 2SG.NOM not upset-FUT 1PL.EXC-ACC
Be quiet! Don't you upset us. (trans.)

(6.30) *Manku-Ø-rru yirnala-a! Mir.ta nyina-layi nhawu-rra yirla*
grab-IMP-NOW this.DEF-ACC not sit-FUT watch-CTEMP only

thurlamanta! Karlwa-Ø manku-lu nhula-a!
staring get.up-IMP grab-PURPss near.you-ACC
Grab this fellow! Don't just sit staring! Get up and grab him!

Imperative clauses mostly conform to the normal patterns of case marking for transitive and intransitive clauses. However, there are two special patterns of case marking found only in positive imperative clauses. These are described in §9.8.

6.2.6 COUNTERFACTUALS

Martuthunira has both active and passive counterfactual inflections. These indicate events which did not happen, or which are not happening now, but which would have been expected to have taken place or be happening if other events had turned out differently. Examples (6.31) and (6.32) illustrate the active inflection, (6.33) and (6.34) involve the passive inflection.

(6.31) *Thampa-rru wiyaa manku-lha parla-a parriingku-marni*
almost-NOW maybe grab-PAST stone-ACC hit-CONTR

warnmalyi-marta, nganaju-u kartara-a-rru pariingku-marni
stone-PROP 1SG.GEN-ACC jaw-ACC-NOW hit-CONTR

piyuwa-ma-lalha-a ngurnula-ngu-u murla-a.
finish-CAUS-PAST-ACC that.DEF-GEN-ACC meat-ACC
[She] almost grabbed a stone and would have hit me with a stone, would have hit me in the jaw, me who finished up her meat.

(6.32) *Ngawu, thurlajinkarrimayiili, malyarru-wa ngunhaa mir.ta*
yes poor.fellow FaFa+1POSS good-YK that.NOMnot

nhawu-lha ngali-i.
see-PAST 1DU.INC-ACC
Yes, our poor old grandfather, good thing he didn't see us.

Ngawu, kuyil, ngunhaa mawuntu-u-rru manku-marni.
yes bad that.NOM harpoon-ACC-NOW grab-CONTR
Yes, he's bad, he would have grabbed a harpoon.

Ngawu, purrkuru waruul, ngunhaa karta-nmarni ngali-i.
yes true still that.NOM stab-CONTR 1DU.INC-ACC
Yes, true enough, he would have stabbed us.

(6.33) *Palalyi, kartu thala karta-nngulaanu, nhumira-rru*
before 2SG.NOM chest stab-PASSCONTR penis-NOW

thaatharra-rri-marni.
open.mouthed-INV-CONTR
In the old days you would have been stabbed in the chest and you would have wet yourself (lit. your penis would have opened up like a mouth).

(6.34) *Nhiingara jalya-ngarayungku-ngulaanu kapalya-ngara-a*
this.PL scrap-PL give-PASSCONTR pet-PL-ACC

ngaliwa-wu-u mungka-lwaa-lpurtu.
1PL.INC-GEN-ACC eat-PURPs=o-COMP
These scraps should have been given to those pets of ours to eat [but for some reason they weren't].

As example (6.34) shows, the attendant circumstances need not be specified but may be implied by the use of the inflection and other grammatical markers, in this instance the 'complementary' clitic *-lpurtu* (§7.2.9).

Counterfactuals are also used to refer to future events. Here the speaker predicts that the event described will not happen unless current circumstances change in some way:

(6.35) *Nhuwana wirta-ngaranhuura-npa-marni jalurra-a piya-rninyji.*
2PL youth-PL know-INCH-CONTR song-ACC sing-FUT

Nganarna wuraal-wa-rru nyina-marni mir.ta-rru piya-l.yarra
1PL.EXC all.right-Ø-NOW be-CONTR not-NOW sing-CTEMP

jalurra-ngara-a purnumpuru-rru.
song-PL-ACC quiet-NOW
You boys should learn to sing the songs. All right, we should be staying quiet and not singing the songs now.

(6.36) *Nhiyu warrirti wurnta-rnu nhuwana-lu yungku-nguli-marni*
this spear break-PASSP 2PL-EFF give-PASS-CONTR

nganaju-u mimi-i.
1SG.GEN-ACC uncle-ACC
This spear broken by you should be given to my uncle [to be fixed]. (trans.)

6.2.7 UNREALISED

The unrealised inflection generally indicates that the event denoted by the verb did not happen, is not happening, or will not happen even though there is every expectation that the event *ought* to happen. Usually the speaker is baffled as to the possible cause of the non-occurrence of the event and in this respect the unrealised inflection is quite different from the counterfactual. The following examples were constructed to elicit an English translation, and are presented here with the informant's extended glosses. These make reasonably clear the kinds of implication the suffix encodes. Notice that the paraphrase given for (6.39) involves the counterfactual form of the verb.

(6.37) *Nhiyu murla kampa-yaangu.*
this.NOM meat be.cooking-UNREAL
"This meat should've bin cooked but he's not. He's a meat there not cooking. He's either hard to cook or no fire there." (constr.)

(6.38) *Kartu jinangku-raangungurnaa?*
2SG.NOM track-UNREAL that.ACC
"What's wrong. Why didn't you track 'im?" (constr.)

(6.39) *Ngunhaa kartarawurri-yaangu.*
that.NOM come.around.corner-UNREAL
"Instead he went other way. He didn't come. Fella that supposed to come 'round, *kartarawurri-marni*, he gone somewhere else." (constr.)

The following examples from unelicited text provide more natural illustration. In (6.40) the speaker has unwittingly seated himself on a bed-roll belonging to people with whom he is required to maintain a relationship of strict avoidance. This avoidance extends to personal

belongings. In (6.41) the speaker is momentarily unable to identify a particular species of bird.

(6.40) *Ngawu, ngayu puni-lha nyina-lu ngurriny-tha, kurnta-yaangu.*
yes 1SG.NOM go-PAST sit-PURPss swag-LOC shame-UNREAL
Yes, I went to sit on that swag, [I] ought to have felt 'shame'.

(6.41) *Ngayu ngalarri-lha-rru warnu. Kuliyanpa-yaangu kalika-a-lwa*
1SG.NOM forget-PAST-NOW ASSERT think-UNREAL one-ACC-ID
kalyarran-ta nyina-wayara-a.
branch-LOC sit-HABIT-ACC
I truly forgot. [I] ought to have thought of that one that always sits on a branch, [but I didn't].

(6.42) *Wantharni-npa-lha-lpurtu kuyil.yarri-lha. Panyu nyina-yaangu*
how-INCH-PAST-COMP become.bad-PAST good be-UNREAL
kur.ta-ngara-lu wankama-rnu. Nhuura-rru nyina-marni.
clever-PL-EFF raise-PASSP knowing-NOW sit-CONTR
How did it happen that [she] became bad. [She] ought to be good, having been brought up by the clever old people. [She] should know.

6.3 DERIVATIONS

6.3.1 PASSIVE

The passive derivational suffix -CM-*nguli-Ø* is attached to verb stems to produce new stems of the Ø-conjugation. The syntax of passive clauses is discussed in §9.6 and §10.5 and is not be discussed at length here. Basically, the passive serves to reorganise the arguments of a predicate so that an accusative object of the active verb appears as the nominative subject of the passive verb, and the subject of the active verb (optionally) appears as a noun phrase marked with the effector suffix. Thus, compare the passive sentence in (6.43b) with its active counterpart in (6.43a):

(6.43) a. *Ngunhu kanyara ngurnu muyi-i yanga-lwayara.*
that.NOM man that.ACC dog-ACC chase-HABIT
That man is always chasing that dog. (constr.)

b. *Ngunhu muyi yanga-nnguli-wayara ngulu kanyara-lu.*
that.NOM dog chase-PASS-HABIT that.EFF man-EFF
That dog is always being chased by that man. (constr.)

The suffix is shared by all the Ngayarda languages and is probably related, at least historically, to an inchoative suffix *-nguli-Ø* to nominal stems (§6.3.7) which also occurs in the Mantharta and Kanyara languages.

6.3.2 COLLECTIVE

Verb stems derived by the addition of the collective suffix allow three different interpretations. First, the suffix may indicate that the activity described by the verb stem is performed together by the participants denoted by the non-singular subject noun phrase. The

following examples illustrate the collective suffix on intransitive verb stems. The different forms of the suffix are presented in Table 6.3 above.

(6.44) *Kulhampa-ngarapuni-marri-layi tharrwa-lu thawura-la-rru.*
fish-PL go-COLL-FUT enter-PURPss net-LOC-NOW
The fish will all swim together into the net.

(6.45) *Ngaliwa nyina-marri-layiwangkarnu-marra.*
1PL.INC sit-COLL-FUT talk-COLL+CTEMP
We'll sit around and have a talk.

Second, where the verb is transitive the suffix often indicates reciprocal action. That is, the participants denoted by the non-singular subject are assumed to be performing the action on one another.

(6.46) *Nhartu-npa-lha-lwa ngula? Marrari-wirraa ngalal nhawu-yarra*
what-INCH-PAST-ID IGNOR word-PRIV just look-COLL+CTEMP

marrari-wirraa, kamparta-ma-rri-nguru. Wantharni-ma-rri-layi?
word-PRIV angry-CAUS-COLL-PRES how-CAUS-COLL-FUT

Parrungka-marri-layi wiyaa.
shout-COLL-FUT maybe
What happened? They're just looking at each other without a word, making each other angry. What will they do next? Maybe they'll start shouting at each other.

However, in many cases the suffix indicates that the action is performed collectively by the subject participants. An explicit transitive object need not be present.

(6.47) *Nganarna murla-a wantha-lwayara pawulu-ngara-a mungka-yarri-waa.*
1PL.EXC meat-ACC leave-HABIT child-PL-ACC eat-COLL-PURPs=o
We used to leave the children meat so they could eat together. (trans.)

(6.48) *Wiruwanti yirla karlwa-marri-layi, ngartil waruul mungka-yarri-layi*
morning only get.up-COLL-FUT again still eat-COLL-FUT

ngurnu tharnta-a.
that.ACC euro-ACC
In the morning we'll get up together, and we'll still have another feed of that euro.

Third, the collective suffix may be used to emphasise the existence of a particular kin relationship between participants in the clause. Specifically, the suffix indicates that the participants are in the same alternating generation set (§1.3.2).

(6.49) *Yimpala-rru-wa. Kartu karri-layi*
like.that-NOW-YK 2SG.NOM stand-FUT

nhurta-npa-marri-ngu-rra-rru. Ngayu wanyjarri-layi.
wild-INCH-COLL-PASS-CTEMP-NOW 1SG.NOM go-FUT

Mir.ta-rru nhuwana-lu nhuunuwarnti-lu puranyi-lwarri-ngu-layi.
not-NOW 2PL-EFF spouse.pair-EFF see-COLL-PASS-FUT
It's like that. [They're] getting angry with you. I'm going. I won't [stay] to be seen by you, husband and wife, in-laws of mine.

(6.50) *Kartu nhawu-yarri-wayara nyinu-malyura-marnu-ngu?*
2SG.NOM see-COLL-HABIT Bro.in.law-2POSS-GROUP-ACC
Have you ever seen that brother-in-law of yours?

Mir.ta, ngayu mir.ta nhawu-yarri-wayara.
not 1SG.NOM not see-COLL-HABIT
No, I've never seen him.

Ngawu, ngayu kangku-layi kartungu nhawu-yarri-waa
yes 1SG.NOM take-FUT 2SG.ACC see-COLL-PURPs=o

nyinu-malyura-ngu.
Bro.in.law-2POSS-ACC
Okay, I'll take you to see your brother-in-law.

Interaction between members of the same generation set is characterised by a tendency towards collective activity while, by contrast, relations between people in the different generation sets typically involve varying degrees of respectful avoidance. The use of the collective suffix to mark the former relationship is a reflection of these institutionalised patterns of social interaction. For more detailed discussion and an explanation of the relationship between collective activity and particular kin relationships in the Ngayarda language area see Dench (1987a).

To sum up, collective verbs may have three different interpretations: action performed by a group acting together (collective), action involving members of a group each acting on the other (reciprocal), or action involving persons in the same generation set (kin group). The reading of a particular instance of the suffix partly depends on the verb to which it is attached and on the syntactic context in which that verb occurs. The range of contexts and the associated interpretations of the suffix are set out in Table 6.4:

TABLE 6.4: POSSIBLE INTERPRETATIONS OF THE COLLECTIVE SUFFIX

Verb	Subject	Object	Interpretation possible		
			Reciprocal	Collective	Kin group
intransitive	non-singular	—		yes	yes
transitive	non-singular	no	yes	yes	yes
transitive	non-singular	yes		yes	yes
transitive	singularno			yes	
transitive	singularyes			yes	

Where the subject of the clause is singular the suffix may only have the kin group interpretation. This does not imply that the subject of the clause must be one of the participants linked by the use of the suffix. For example, in (6.51) the participants linked by the suffix as belonging to the one generation set do not include the subject of the clause (the speaker). One is the object of the verb and the other a locational argument.

(6.51) *Ngayu kangku-yarri-lha panaka-ngurni karimarra-wuyu-u*
1SG.NOM take-COLL-PAST section-OBSCRD section-SIDE-ACC

marrari-mulyarra,Martuthunira-a nhuura-npa-waa.
language-ALL Martuthunira-ACC know-INCH-PURPs=o
I took the *karimarra* boy along, after the *panaka* boy, towards the language, to learn Martuthunira.
(I taught two boys who are together in the same generation set.)

There is no syntactic context which forces a reciprocal reading for a verb bearing the collective suffix. Although a reciprocal reading is available where a transitive verb appears with no object and the subject is non-singular, a collective reading is always possible here given the frequent ellipsis of arguments. To some extent, interpretation as reciprocal or collective depends on the particular verb: example (6.52) below will almost always have a collective reading while (6.53) will usually have a reciprocal reading:

(6.52) *Ngaliwa mungka-yarri-nguru.*
1PL.INC eat-COLL-PRES
We're eating together. (?? We're eating one another.) (constr.)

(6.53) *Ngaliwa thani-yarri-nguru.*
1PL.INC hit-COLL-PRES
We're hitting one another. (?? We're hitting together.) (constr.)

Thus separate collective and reciprocal meanings need not be established for the suffix. Rather, a single collective meaning will allow a reciprocal interpretation in certain contexts and with certain verbs. While a clause with a non-singular subject will allow a kin-group reading as well as a possible collective or reciprocal reading, the suffix itself does not require that members of the group be in the same generation. This is made clear in example (6.54), in which the non-singular subject is a disharmonic pronoun (see §5.1) and hence only the collective (or reciprocal) reading is possible.

(6.54) *Ngunhaa mir.ta waruul kuliya-rnuru nganajumarta-a*
that.NOM not still hear-PRES 1DU.DISHARM-ACC

wangkarnu-marri-nyila-a.
talk-COLL-PrREL-ACC
He still can't hear us talking together (to one another).

The kin-group meaning of the suffix must be independent of the collective meaning and the suffix must be described as polysemous between these two meanings.

6.3.3 INCHOATIVE *-npa-Ø*

The *-npa-Ø* inchoative derives mainly intransitive verbs from nominal stems and is fully productive. Inchoative verbs describe the process of a change in state of the subject of the verb, resulting in the state denoted by the nominal stem. However, in some cases the verb may describe the persistence or maintenance of a state, assumed to be temporary, rather than the inception of that state. Most examples of the inchoative involve nominal stems denoting properties of entities. The subject of the verb thus attains the property denoted by the nominal stem (illustrative sentence examples are indicated in parentheses).

piyuwa-npa-Ø become finished, die (7.87)
finished-INCH-

muthumuthu-npa-Ø cool-INCH-	cool down (4.161), (9.53)
jinyji-warla-npa-Ø fat-FULL-INCH-	get fat (5.37)
malumalu-npa-Ø dark-INCH-	get dark (9.57), (10.57)

Where the stem is a nominal which is usually understood to denote an entity, the inchoative verb forces an interpretation whereby this nominal is seen as denoting a property. It is not possible to say that the subject of the verb *becomes* the entity denoted by the nominal stem in all cases.

thurla-npa-Ø eye-INCH-	wake up, be born (4.56)
nganyurta-npa-Ø sweat-INCH-	be sweating
puwara-npa-Ø coal-INCH-	(fire) become coals (7.35), (10.6))
yirlirli-npa-Ø maggot-INCH-	(meat) become maggoty (6.22)
pawulu-ngara-npa-Ø child-PL-INCH-	have children (6.55)

(6.55) *Ngayu nhawu-lha kayarra-atharratal-yu, yaanka wiyaa,*
1SG.NOM see-PAST two-ACC bird(sp.)-ACC spouse.pair maybe
jampa-rru pawulu-ngara-npa-layi-rru.
moment-NOW child-PL-INCH-FUT-NOW
I saw two *tharratal* birds, maybe husband and wife, they'll soon be getting children.

On locational nominals (either stems involving a locational nominal suffix, inherent locatives, or adverbial demonstratives (6.56)), the inchoative derives a motion verb (§9.5.5).

parlu-ngka-npa-Ø top-LOC-INCH-	get to the top
kana-ngka-npa-Ø clear-LOC-INCH-	come into the clear (6.59)
yilangu-npa-Ø here-INCH-	get to be here
ngurra-arta-npa-Ø camp-DIRALL-INCH-	move to camp (4.76)
yawurrarni-npa-Ø west.CENT-INCH-	come here to the west

(6.56) *Nhiyu-rru-wa murna-ngka-rru. Ngulangu-npa-lha-rru,*
this-NOW-YK close-LOC-NOW there-INCH-PAST-NOW

murna-ngka-npa-lha-rru thanuwa-ngara-marta, nyina-layi
close-LOC-INCH-PAST-NOW food-PL-PROP sit-FUT

wangkarnu-marra-rru.
talk-COLL+CTEMP-NOW
This [mob] is close now. Once they've got there, they come close up with all the food, they stop and talk together.

A number of inchoative verbs take an accusative object. First, the two-place nominal predicates *nhuura* 'knowing', and *wiru* 'wanting', form verbs with two arguments (§9.5.7).

nhuura-npa-Ø	learn (6.35), (6.51)
wiru-npa-Ø	want, like (10.25)

Other inchoative verbs optionally take an accusative argument.

panyu-npa-Ø	become good (4.91)
good-INCH-	be kind to NP (8.36)
paya-npa-Ø	become angry
angry-INCH-	get angry with NP (4.157)
murna-npa-Ø	get closer
close-INCH-	get close to NP

The verb *murna-Ø* 'get close to', implies a changing locative relation between two arguments, the one coming closer to the other. By contrast, the verb *murna-ngka-npa-Ø* 'come close up' (6.56), describes the attainment of a defined locational goal. Finally, some inchoative verbs occur in the data with added 'benefactive' arguments:

pirrimanta-npa-Ø	become a fiddler
fiddler-INCH-	fiddle with NP
jirruna-npa-Ø	be sneaky
sneaky-INCH-	sneak up on NP (4.145)

6.3.4 CAUSATIVE/FACTITIVE *-ma*-L

The suffix typically attaches to a nominal stem and derives a transitive verb. As with the inchoative suffix, the most common nominal stems denote properties of entities. The subject of the causative verb effects a change in state of the object of the verb, the eventual state being denoted by the nominal stem of the verb.

karlara-ma-L	make hot
hot-CAUS-	
jarrala-ma-L	make healthy, heal (8.45)
healthy-CAUS-	
nhurnti-ma-L	kill (5.105)
dead-CAUS-	

punkuwunku-ma-L rolled.up-CAUS-	roll up

When based on a nominal which usually refers to an entity, the verb describes the creation of that entity. The object of the verb (if it appears) describes the materials out of which the referent of the verb stem is made.

karla-ma-L fire-CAUS-	make a fire (out of firewood) (7.107)
marntanhu-ma-L net-CAUS-	make a net (spinifex) (4.92)
ngurriny-ma-L swag-CAUS-	roll a swag (swag)
warrirti-ma-L spear-CAUS-	make a spear (type of wood) (6.27)
pul.yu-ma-L plug-CAUS-	make a chewing quid (of tobacco)
pirtuwangu-ma-L prisoner-CAUS-	make an initiation prisoner (youth) (7.12)

The causative suffix also occurs on inflected nominal stems:

puuthuni-marta-ma-L spearhead-PROP-CAUS-	put a spearhead (on a spear) (4.35)
nguyirri-wirraa-ma-L sleep-PRIV-CAUS-	keep awake, make without sleeping (4.127)
mirru-ngka-ma-L spearthrower-LOC-CAUS-	load (spear) onto spearthrower
wilyara-la-ma-L shoulders-LOC-CAUS-	put (animal carcass) on shoulders
kartara-la-ma-L cheek-LOC-CAUS-	put (tobacco plug) in cheek

Verbs based on locative expressions are especially common. When the locative expression describes a body-part location, the body part is usually associated with the subject:

(6.57) *Ngayu yarta-wuyu-lpurtu kanyara,mir.ta wiru kuliya-la-ma-rninyji*
1SG.NOM other-SIDE-COMP man not wanting ear-LOC-CAUS-FUT
nhuwana-wu-u marrari-ngara-a.
2PL-GEN-ACC word-PL-ACC
I'm a man of the other patrimoiety (lit. side), I don't want to get your words in [my] ear.

On some manner nominals the causative suffix derives a verb which can be glossed as ‘do MANNER’. The action described by the verb is assumed to be transitive and an affected accusative object may appear.

jarruru-ma-L
slowly-CAUS-
do slowly (to NP) (6.1))

murti-ma-L
fast-CAUS-
do quickly (to NP) (6.58)

yimpala-ma-L
like.that-CAUS-
do like that (to NP)

(6.58) *Nhula* *kalayamarta* *thuulwa-l.yu.* *kartu* *murti-ma-rnuru*
near.you billy.can pull.out-IMP 2SG.NOM fast-CAUS-PRES
karlarra-npa-wirri-i.
hot-INCH-LEST-ACC
Pull out that billy can [from the fire]. Do it quickly lest it get [too] hot [to hold].

Finally, the causative has a restricted function deriving transitive verbs from the past tense forms of intransitive verbs (§6.2.2).

wanti-lha-ma-L
lie-PAST-CAUS-
make lie down

parrani-lha-ma-L
return-PAST-CAUS-
bring, send back (5.82), (6.17)

The informant would not accept examples based on transitive verb stems and instead produced analytic causatives using various verbs of coercion .

6.3.5 INVOLUNTARY STATES *-rri-Ø*

The *-rri-Ø* verbalising suffix derives intransitive verbs describing involuntary bodily processes, or the involuntary development of mental states.

parrawarra-rri-Ø
shivering-INV-
shiver

nguri-rri-Ø
odour-INV-
stink, be smelling

thaatharra-rri-Ø
open.mouthed-INV-
become open-mouthed (6.33)

panga-ngara-rri-Ø
itch-PL-INV-
get itchy (4.159)

kur.ta-rri-Ø
clever-INV-
become clever

ngala-rri-Ø
wrong.thought-INV-
forget (4.157), (6.41)

nhuura-rri-Ø
knowing-INV-
realise (9.85)

A *-rri-Ø* inchoative is common to the languages of the Pilbara and often has a wider function than the Martuthunira suffix. For example, in Ngarluma the *-rri-Ø* inchoative appears to be the fully productive intransitive verbaliser (corresponding to Martuthunira

*-npa-*Ø). Perhaps related to this, there are many verbs in Martuthunira which appear to involve a *-rri-*Ø derivational suffix but which do not conform to the semantics of the suffix as described here:

kanarri-Ø	come
cf. *kana*	clear, open
kartarawurri-Ø	come around a corner
cf. *kartara*	cheek
karryarri-Ø	crouch down
(cf. Panyjima *karrka* pelvis)	

6.3.6 BODY NOISES *-karri-Ø*

This suffix appears on a few nominals all of which describe involuntary body noises. The resulting verbs are intransitive.

jinkurn-karri-Ø	sneeze
sneeze-NOISE-	
ngayiny-karri-Ø	breathe
breath-NOISE-	
wuuny-karri-Ø	make a ‘wuu’ noise
noise-NOISE-	(call of male bustard)
thiirr-yarri-Ø	fart
fart-NOISE-	
nhuurr-yarri-Ø	snore (make a ‘nhuurr’ noise) (9.135)
noise-NOISE-	
kaal-yarri-Ø	click (of sinuses)
?-NOISE-	

The suffix may be involved in the following verbs also:

pamararri-Ø	call out to (5.18)
cf. *pama*-L	shout
parntayarri-Ø	explode (10.33)
cf. *parnta*-L	rain (4.25)
wiruwarri-Ø	be homesick (6.11)
cf. *wiru*	feelings, wanting

In the first two cases the suffix (*-rarri* following stem final *a*, *-yarri* following *i*) appears to be attached to a verb stem. However, there are not enough examples in the data to be sure of the relationship between these verb forms.

6.3.7 PSYCHOLOGICAL STATE *-nguli-Ø*

This suffix is common to a number of languages of the area including Panyjima, Yinyjiparnti and Jiwarli. In Martuthunira the suffix is normally attached either to nominals

denoting some physical property, or to nominals denoting body parts. The verb based on the physical property nominal describes a psychological awareness of the existence of that state in the body. Based on a body part the verb describes a pain in or lack of function in that part.

punga-nguli-Ø guts-PSYCH-	have stomach ache
kuyil-nguli-Ø bad-PSYCH-	feel bad (6.16)
muthu-nguli-Ø cold-PSYCH-	feel cold
puntharri-nguli-Ø chill-PSYCH-	have a chill

Although the two suffixes have very different functions, this psychological state inchoative is most likely related to the passive derivational suffix at some diachronic level. Example (6.59), which looks very like a passive but which involves a nominal stem other than a physical property or part, suggests a 'missing link':

(6.59) *Ngaliwa wayi yakarranguwii nhawu-layi kana-ngka-npa-nyila-a*
1PL maybe sun maybe see-FUT clear-LOC-INCH-PrREL-ACC

wii warnan-nguli-lha-nguru wii.
maybe rain-NGULI-PAST-ABL maybe
Maybe we'll see, if the sun comes out in the clear, that we've been rained in maybe.

Although other constructions with the nominal *warnan* 'rain', were accepted, my attempts to elicit similar examples with other nominal stems, or with additional arguments (such as effector noun phrases) failed.

6.3.8 CONTROLLED CONTACT *-tha*-L

This suffix occurs on just a few verb and nominal stems and may be related, ultimately, to the Western Desert verb *thu*-N 'to put' (Dixon 1980:405), which O'Grady (1966) also reconstructs for proto Ngayarda. The derived transitive verb emphasises a controlled bringing into contact of two objects.

witiwiti-tha-L hanging-PUT-	hang up
wurrulywa-tha-L leaves-PUT-	place on leaves
punkurri-tha-L covered-PUT-	cover over
nguri-tha-L odour-PUT-	sniff at (7.83)
karta-tha-L chop-PUT-	chop out (honey), carve (7.40) (cf. *karta*-L 'stab, poke, chop')

warrpurri-tha-L	bathe (a wound, sore)
wash-PUT-	(cf. *warrpurri*-Ø ‘swim, wash’)

6.3.9 THE -*:ngku*-Ø VERBALISER

This verbaliser derives transitive verbs of the NG-subconjugation from nominal stems. On the basis of the few examples it is not possible to describe the meaning of the suffix.

jina-ngku-Ø	track (6.38)
foot-VERB-	
waya-ngku-Ø	frighten (7.108)
fear-VERB-	
murti-ingku-Ø	run after
fast-VERB-	
pari-ingku-Ø	squash flat, crush (4.59)
flat-VERB-	

The suffix is also involved in the following verbs:

parrnpiingku-Ø	throw on ground
thartuungku-Ø	meet a relative (5.69)

Lengthening of the stem final vowel occurs only where this final vowel is *i* or *u*, suggesting an original suffix of the form:

*-C*angku*-Ø

Given the patterns of lenition that have affected the language, and the fact that these verbs select the NG-subconjugation form of the unrealised modal inflection, the suffix can be tentatively identified as the result of the historical incorporation of the independent verb *kangku*-Ø ‘take, carry’. However, without a better understanding of the meaning of these few verbs it is not possible to take this analysis very far.

6.3.10 ZERO DERIVATIONS

A number of verb stems are identical to nominal stems and suggest a restricted process of zero derivation.

jiwarra-Ø	shine white (of eyes)
white	
kurnta-Ø	speak or feel ‘shame’ (6.40)
shame	
puntharri-Ø	bleed, break body part (4.34)
chill	
marnjura-L	urinate
urine	
kuliya-L	hear (4.67)
ear	

malyarra-L pain	be feeling sick, unwell (7.83)

All of these verbs refer essentially to body processes but it is not possible to make any more specific generalisations. Choice of conjugation membership does not appear to have any clear motivation from these examples; it does not correlate with the transitivity of the verb. In addition, a number of verbs are based on locative expressions:

murna-ngka-Ø close-LOC-	get closer (of sun)
kana-ngka-l-kana-ngka-Ø clear-LOC-?-clear-LOC-	become light (of day)
parna-ngka-L head -LOC-	put on head
yurti-ngka-L side -LOC-	aim at

Finally, two verbs which appear to involve the locative suffix and which might be grouped with the first set are:

wayangka-Ø *waya*	be frightened (of) (7.99) fear
puungka-Ø	blow with the mouth

6.3.11 OTHER POSSIBLE DERIVATIONAL SUFFIXES

A few verb forms suggest other derivational suffixes but not enough examples have been found to allow a clear definition of the range and function of these processes. Two verbs allow identification of a nominal stem with a lengthened final vowel which may descend from a suffix **-ka*, cognate with the Ngarluma productive causative *-ka*-L.

mulha-a-L point-VERB-	put a point on (4.35)
ngal.ya-a-L spike-VERB-	spin (hair)

The following unanalysable verbs may also have been derived by this suffix:

jankaa-L	tie up
jarraa-L	tie up (5.1)
puraa-L	go (avoidance language)

Two verbs involve the addition of a suffix *-nyja* to a nominal stem:

kuna-nyja-L faeces-VERB-	defecate (on) (4.30)
yawurru-nyja-L west-VERB-	miss a shot at

6.3.12 SUMMARY EXAMPLES

A few nominals appear with a range of verbalising suffixes clearly demonstrating the different meanings of the morphemes. Verbs based on *nhuura* ‘knowing’ and *kuliya* ‘ear’ are listed below.

nhuura	knowing
nhuura-npa-Ø knowing-INCH-	learn
nhuura-ma-L knowing-CAUS-	teach, show
nhuura-rri-Ø knowing-INV-	realise

kuliya	ear
kuliya-L	hear
kuliya-npa-Ø ear-INCH-	think, believe
kuliya-ma-L ear-CAUS-	remind
kuliya-rri-Ø ear-INV-	feel, perceive