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PANYJIMA PHONOLOGY AND MORPHOLOGY

Alan Charles Dench

A thesis submitted in partial satisfaction of the requirements for the degree of Master of Arts of the Australian National University.

February, 1991
Unless otherwise acknowledged this thesis is the original work of the author.

[Signature]
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1. THE LANGUAGE AND ITS SPEAKERS

Panyjima is a Pama-Nyungan language of the Ngayarda subgroup (Fn. 1), originally spoken in the tablelands of the Hammersly Range in the Pilbara region of Western Australia. Today most of the remaining speakers of the language, who number approximately sixty, live in the coastal town of Onslow. Others live in Roebourne and Wittenoom and on a number of pastoral leases in the Hammersly area.

1.1 Linguistic Type

Panyjima is in many ways typical of the suffixing languages of Western Australia.

The phoneme inventory is typically Australian. There are six points of articulation for stops and nasals with both a laminal and an apical contrast. There are four laterals, corresponding to the non-peripheral stops, two glides and two rhotics. There are three short vowels, and three long vowels of rare occurrence.

Nouns and adjectives cannot be distinguished on morphological grounds. Nominals take number and other derivational suffixes, and a set of inflectional case markers. Verbs take inflectional markers of tense, aspect, mood and voice.

A three-way number distinction operates in the pronoun paradigm and an inclusive/exclusive distinction operates for non-singular first person. The first and second person non-singular pronouns also code certain kin relationships between the speaker and the addressee(s).

Panyjima (and other languages of the Ngayarda subgroup) differ most markedly from other Australian languages in having a nominative/accusative case marking system with a productive syntactic passive. It is clear, however, that this system has evolved out of an earlier ergative case marking system.

1.2 Dialects

Speakers recognize that two dialects of Panyjima were originally spoken on the Hammersly Range though they appear to have no received ideas as to how the two differed. The Pantikura dialect was spoken on the higher plateaus of the Hammersly Range, while the Mijaranypa dialect
was spoken in lower areas. The data on which this thesis is based was collected from people who identify with the Pantikura dialect.

O'Grady Voegelin and Voegelin (1966) give two dialect names, Ntukurr and Milyaranpa. Milyaranpa is most likely the Mijaranympa dialect mentioned by my informants. It is possible that ntukurr is in reality the word thukurr(pa) (Panyjima does not permit initial apical consonants) meaning "straight" or "correct" which is often applied to language and speech style.

1.3 Territory and Neighbours

Tindale (1974) describes the traditional territory of the Panyjima as follows:

Upper plateau of the Hamersly Range south of the Fortescue river; east to Weediwolli (sic [Weeliwolli]) creek near Warillana; south to near Rocklea, on the upper branches of Turge Creek east to the Kunderong Range. In later years under pressure from the Kurama, they moved eastward to Yandicoogina and the Ophthalmia Range forcing the Niaball eastward. They also shifted south to Turge and Prairie Downs 'iving out the Mandara tribe, now virtually extinct.

Tindale (1974:255)

The map overleaf gives this location and the approximate location of a number of other languages mentioned in this thesis.
Immediately to the west of Panyjima lie Yinyjiparnti and Kurrama which are generally assumed to be dialects of the one language (Yinyjiparnti) of the Ngayarda subgroup. Both are nominative/accusative and Yinyjiparnti has undergone extensive lenition and deletion of consonants which has led to the development of vowel sequences uncommon in this area (see O'Grady 1966, and Wordick 1979). Panyjima is fairly closely related to Yinyjiparnti though the phonological differences are striking.

The Palyku language to the north and east of Panyjima has generally been assumed to be a dialect with Panyjima (following O'Grady 1966). While the two have a very high percentage cognate density (75% by O'Grady) they are structurally very dissimilar. While Panyjima is totally nominative/accusative in its case marking system, Palyku is split ergative. Palyku has a full set of cross referencing pronominal clitics to the verb while Panyjima has only two which are most likely recent borrowings. My informants clearly did not regard Palyku as a dialect of Panyjima but instead suggested it was related very closely to Nyiyapali. Tindale (1974) describes a history of conflict between the Panyjima and Palyku involving the kidnapping of women and children. If this was in fact the case it may help explain the high degree of lexical similarity between the two languages.

Very little is known about the Nyiyapali language though some authors regard it as a dialect of Western Desert. It is clear that the Panyjima have a long history of contact and cooperation with the groups on the edge of the Western Desert.

The languages to the south (the Mantharta and Kanyara subgroups) do not appear to be closely related to Panyjima.

1.4 Sociolinguistic Information

Certain aspects of traditional Panyjima social behaviour are clearly reflected in the language structure and in its use. In the traditional society, certain codes of behaviour were appropriate between members of the group depending on their kin relationship to one another. The importance of the kinship system in regulating behaviour among the members of the society is reflected in the pronoun paradigm and in the lexicon. Thus before describing the pronoun paradigm (section 3.4 below) and the kinterms (section 3.3 below) it is necessary to describe in some
detail the Panyjima kinship system.

1.4.1 The Kinship System

The Panyjima kinship system is of the Kariera (Kariyarra) type and kin are divided into four sections. Figure 1. below and overleaf illustrates the Panyjima system from the point of view of a male ego of the panaka section.

Figure 1: Kinship system for male ego of panaka section

<table>
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<tr>
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<tbody>
<tr>
<td>Sibling</td>
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<td>Kid</td>
<td></td>
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<tr>
<td>Marriage</td>
<td></td>
<td></td>
<td>Kid</td>
<td></td>
</tr>
<tr>
<td>Descent</td>
<td></td>
<td></td>
<td>Kid</td>
<td></td>
</tr>
</tbody>
</table>

Note:
- Ego's view of the kinship universe is the same as his brother's.
- Fa = FaBro
- Fa-in-law = MoBro
The terms in the diagram are all ego-based kin reference and address terms. The grandparent/grandchild terms are to some extent reciprocal. For example, a man and his father's father will call one another, and refer to one another, as mayali, and a woman and her daughter's daughter will call one another and refer to one another as kantharri. These terms are not fully symmetrical. A man will generally call all his son's children, whether male or female, mayali. If he wants to make a distinction between his male and female grandchildren, he may use the term kantharri for his son's daughter. Similarly, a woman will usually use the term kantharri in addressing or referring to her daughter's children, though she may use mayali for her daughter's son.

Notice that only two of the four sections occur in any generation level, and that generations alternate. Thus for a male ego of the panaka section, all kinsmen of his same generation will be either panaka or karimarra. Those kinsmen of his grandparents' or grandchildren's generation will also be either panaka or karimarra. Ego's parents and his children or his siblings' children will, on the other hand, be either milhangka or purungu. I will use the term "harmonio" to refer to kinsmen of the same set of alternating generations as ego, and the term "disharmonic" to refer to ego's kinsmen of the other set of alternating generations (following Hale 1966).

Notice further that only two of the four sections appear on either side of the diagram. All members of ego's patrimoiety (to the right of Fig.1) are either panaka or milhangka, while all the members of ego's wife's patrimoiety (to the left of Fig.1) are either karimarra or purungu. I will use the term "affinal" to refer to male (Fn.2) kinsmen of ego's wife's patrimoiety. That is, in the terms of this thesis, a person is affinally related to his mother's brother (MoBro), his mother's brother's son (MoBroSo), his mother's father (MoFa), and so on. In later sections I will invoke the distinctive features [+ affinal] and [+ disharmonic] (Fn.3) in describing groups of related individuals.

1.4.2 The Paathupathu Avoidance Language

Like many Australian languages, Fanyjima has an auxiliary speech style used mainly in speaking to certain kinsmen. The circumstances requiring the use of this speech style, called Paathupathu, are outlined in the description of avoidance relationships given below. The
Paathupathu style is identical with everyday Panyjima with respect to morphological and syntactic processes, that is, the two styles have the same basic grammar. However, the words used in one style are different from those used in the other style. In particular, almost every verb of the everyday language has an alternative Paathupathu form. For the most part the Paathupathu verbs are generic and are used to replace a number of everyday verbs. The nominals of the Paathupathu style do not exhibit the same generic properties. The vast majority of Paathupathu nominals are analyzable as the everyday word augmented by some suffix. One such productive suffix is described in section 3.2.2.11 below. Although the two speech styles have the same grammatical forms, it is apparent that the grammatical forms are used in slightly different ways. That is, the Paathupathu style is characterized by circumlocution and by a general lack of specificity. For example, rather than using the general locative case inflection for describing the location of a person or object, there is a tendency for the indirect allative inflection to be used instead. Another example is the common use of a verb built on the indefinite, specific pronoun, to avoid making explicit reference to a verb event. This cannot properly be described as the use of a generic verb. The Paathupathu speech style is only remembered in any detail by a few old men and so far I have been able to collect only a few sentences. Certainly much more data could, and should, be collected.

1.4.3 Avoidance Relationships

A number of respect and avoidance relationships were appropriate between certain kin though to a large extent they are not practised today. Firstly, ones in-laws, particularly mother-in-law (FaZi) and father-in-law (MoBro), but also brother-in-law (MoBroSo), must be largely avoided. Traditionally a man did not talk to his mother-in-law but rather talked through an intermediary and using the Paathupathu avoidance style. Paathupathu was also used when talking to, or within earshot of one's father-in-law and sometimes with one's brothers-in-law. A certain degree of respectful behaviour was observed with all kinsmen classified as FaZi and MoBro since all could potentially be one's in-laws.

In addition to avoidance relationships based on marriage, a man must follow strict codes of behaviour with certain of the men involved
in his initiation. In particular a man must avoid speaking to his mangkalyi, or "doctor", in much the same way as he avoids talking to his mother-in-law. Also his brothers must avoid his mangkalyi and he must avoid his brothers' mangkalyis. One cannot talk to one's mangkalyi except through an intermediary (and, traditionally, using Prathupathu) though the mangkalyi may talk to his "patient", wuntaja, directly (and without using Prathupathu). Despite this strong avoidance behaviour relationship, the bond between a man and his mangkalyi is very close. A man must regularly visit his mangkalyi and is responsible for him in all tribal matters. If the mangkalyi transgresses tribal law, it is his wuntaja who carries out the ritual punishment. A man's mangkalyi is one of his classificatory mother's brother's sons, or brothers-in-law. There are therefore many types of behaviour appropriate to men related as mother's brother's sons. Two kumpali may be actual mother's brother's/father's sister's sons, they may be brothers-in-law, or they may be mangkalyi and wuntaja (fn. 4).

The traditional marriage system rarely operates in the modern community and as a result the kinship system is largely in disarray. However, the initiation of young men into the tribe is still practised and since the ceremonial roles are determined on the basis of kin relationships, parts of the kinship system are still very important. The rules of respect and avoidance appropriate to the initiation ritual are also still practised.

1.5 Present Situation

The remaining speakers of Panyjima live mainly in the coastal town of Onslow. There are perhaps sixty speakers of the language the youngest being in their early twenties. These younger speakers are tending to mix Panyjima with Yinyiparnti which can in some ways be regarded as an emerging lingua franca of the Pilbara area. It appears that most younger speakers are not aware of this mixing though their elders are.

To a large degree the Onslow community is characterized by the problems associated with fringe dwelling Aboriginals dissociated from their traditional country and way of life. The traditional marriage system has broken down and as a result much of the respect and avoidance behaviour associated with this system is no longer practised. However, since the early 1970's there has been a great resurgence of interest in
traditional culture to the extent that young men are now increasingly encouraged to learn the ways of their fathers. The purchasing of Peedsmullah station for the community has helped this revitalization immensely. The station is a pastoral lease operated entirely by the Onslow community and gives the community free access to grounds set aside for ceremonial purposes. It can only be hoped that this revitalization will continue and will effect a resurgence of interest in the language which is otherwise not likely to survive for more than about sixty years.

2. PHONOLOGY

2.1 Phonemes and their Realization

The Panyjima phoneme inventory is typical of languages of Western Australia. There are six points of articulation for stops and nasals with both a laminal and an apical contrast. A lateral corresponds to each non-peripheral stop. Panyjima has three short vowels and three corresponding long vowels of rare occurrence.

2.1.1 Consonants

Table 1 gives the Panyjima consonant inventory (Fn. 5).
Table 1: Consonant Phonemes

<table>
<thead>
<tr>
<th>Peripheral</th>
<th>Bilabial</th>
<th>Velar</th>
<th>Alveolar</th>
<th>Dorsal</th>
<th>Dental</th>
<th>Palatal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop</td>
<td>p</td>
<td>k</td>
<td>t</td>
<td>rt</td>
<td>th</td>
<td>j</td>
</tr>
<tr>
<td>Nasal</td>
<td>m</td>
<td>ng</td>
<td>n</td>
<td>rn</td>
<td>nh</td>
<td>ny</td>
</tr>
<tr>
<td>Lateral</td>
<td>l</td>
<td>rl</td>
<td>l</td>
<td>lh</td>
<td>ly</td>
<td></td>
</tr>
<tr>
<td>Rhotic</td>
<td>r</td>
<td>rr</td>
<td>r</td>
<td></td>
<td></td>
<td>y</td>
</tr>
<tr>
<td>Glide</td>
<td>w</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

The following minimal pairs illustrate the apical contrast:

- yata "many" yarta "shield"
- kanta "Leave it!" karnta "tears"
- kulu "head louse" kurlu "hot"
- kuta "short" kurta "brother"
- panti-Ø "to sit" parnti-Ø "to be smelling"
- mintalypa "carefully" mirntalypa "something unreal"

The following minimal pairs, and near minimal pairs, illustrate the laminal contrast:

- thampa "what about you" jampa "moment"
- thananyungu '3pl' jenanyungu "pigweed"
- thurtu "sister" jurtu "nipple"
- ngatha '1sgNOM' ngaja "mouse"
- nhupolu '2dl' nyupa "wife"

The following sets of minimal pairs illustrate the stop/rhotic contrasts, t/rr and rt/r:

- kati-Ø "to take, carry" karri-Ø "to stand"
- jiti-jiti "willy wagtail" jirri "thorn"
- putirta 'bush type' purri-rta "pull-FUT"
- marta "blood" mara "hand"
- marti "marks" mari "younger sister"
Stops are laxly articulated and are generally voiceless and unaspirated with a tendency toward voicing in medial position.

The velar consonants are articulated further back in the mouth than is usual for an Australian language and for some speakers /k/ and /ng/ approach [q] and [ŋ]. There is also a tendency for velar consonants to be rounded between rounded vowels, or initially preceding the rounded vowel.

As a general characteristic of languages in this part of Western Australia, the apical contrast is often not obvious in free speech. It is often very difficult to distinguish apico-alveolar stops and nasals from apico-domal stops and nasals. There is a strong tendency for apico-domaLs to be fronted to post-alveolar articulation following the high front vowel /i/, and to a slightly lesser extent preceding this vowel. Further, there is a tendency for the apico-alveolar stops and nasals to be backed to post-alveolar articulation following or preceding the back vowel /u/, especially when this vowel is itself in the environment of a preceding or following velar consonant. The fact that velars are often very backed suggests some tongue-pull is affecting the articulation of the consonants. It is clear in a number of examples that the allophonic variation of apicals has led to the rephonemicization of certain consonants. For example (fn. 6):

```
murru-rni  >  Yn murriri  >  Fn murrin
back-HENCE  behind  behind
```

Most of the cases involve the rephonemicization of apico-domas to apico-alveolars in the environment of /i/. It appears that a rule changing retroflex stops and nasals to alveolar stops and nasals has some morphophonemic status in Yinyjiparnti where it relates the N- and L- verb conjugations (see section 3.7.2 below). The same rule operates optionally in Panyjima and thus cannot be called a full morphophonemic rule. In Panyjima the rule operates not only for L-conjugation verbs with stem final /i/, but also for θ-conjugation verbs with stem final /i/. For example:

```
yirtiyirti "hanging"  yirl "spear point"
```
Wordick (1979) notes that in Yinyjiparnti the partial neutralization of the apical contrast is recognized as a particular style of speech referred to as "talking light". The status of this speech style and it's sociolinguistic function (if any) is a topic for further research.

The apico-alveolar stop /t/ is generally quite tensely articulated in relation to the other stops (though still lax in comparison with other Australian languages). While the apico-dental stop may occur intervocally as a retroflex tap, it is not at all common for the apico-alveolar stop to be realized as a tap.

The apico-dental lateral, when following the back vowel /u/ and preceding a velar consonant, is often almost indistinguishable from the rhotic /r/.

Sequences of lateral plus the bilabial stop /p/ are characterized by a glottal stop preceding the bilabial stop.

The apico-alveolar rhotic /rr/ is realized as a trill preceding a consonant though never intervocally. It does not occur in final position. In the intervocalic position it is often realized as a single tap but perhaps more commonly occurs as an alveolar rhotic continuant. For this reason I treat it in the same manner as the retroflex rhotic continuant /r/.

There is variation in some words between initial laminal stops. For example:

jartuntarra  thartuntarra

Usually, however, when quizzed, the informant would show surprise at the use of the less common variant (for the particular word) and would explain his utterance in terms of interference from another language.

The glides /y/ and /w/ are very often not articulated in word initial position when followed by the vowels /i/ and /u/ respectively. The deletion of the initial glide does not appear to be affected by the medial consonant. Two examples are:
2.1.2 Vowels

Table 2: Vowel Phonemes

<table>
<thead>
<tr>
<th>Front</th>
<th>Back</th>
<th>Round</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>i, ii</td>
<td>u, uu</td>
</tr>
<tr>
<td>low</td>
<td>a, aa</td>
<td></td>
</tr>
</tbody>
</table>

Fanyjima has three short vowels and three long vowels of rare occurrence. The most common instance of a long vowel is in the 'passive participle' verb inflection -jangaanu/-rnaanu (see section 3.7.3 below) which is most likely borrowed from Yinyjiparnti. In the data collected so far only twenty words with long vowels have been found of which only three do not have the long vowel in the initial syllable. The twenty words are listed below.

jaa-ma-l  
"to yawn"

kaarrwanyji-ŋ  
"to slip (cut of the hand)"

maatha  
"master (Eng)"

ngaa-karta-L  
"to buzz (of bees)"

paarn-pi-L  
"to throw down"

paaruma-L  
"to settle a disagreement"

pinpakaa-L  
"to flash repeatedly"

thaa-L  
"to send, let go"

thaa-karta  
"hollow log"

thaa-thu-L  
"to pour"

thaa-warru  
"carpet snake"

jiiny-jinya-ma-L  
"to make a clicking noise"

jiirama-L  
"to shear a sheep (Eng)"
nyininirri-Ø
partiikunha
pli-karri-Ø
juuma-l
nguurn-ma-l
puulpa
thuumaya

"to sing"
"Clamina Gorge"
"to make a whistling sound as in a ricocheting bullet"
"to shoe a horse (Eng)"
"to grunt"
"bull (Eng)"
"store (Eng)"

Of the twenty words above, five are borrowings from English. Another ten appear to involve a monosyllabic root. It is also possible that some of the forms are borrowings from Yinyjiparnti, which has undergone drastic lenition resulting in numerous long vowels.

I have found no instances in which the short/long difference distinguishes two words. However, since it is not possible to predict the occurrence of long vowels, and since they are important to rules of stress placement and morphophonemic alternation, I have treated them as phonemes separate from their short vowel counterparts.

All three short vowels have a range of pronunciations depending on their consonant environment.

Before laminal consonants, vowels are characterized by a short high front vowel off-glide.

There is some tendency toward nasalization of vowels in the environment of nasals, and some tendency towards retroflexion of vowels in the environment of apico-domal consonants. Notice that this is counter to the tendency, described above, for apico-domals to be fronted in the environment of the vowel /i/. It appears that there are two contrary tendencies; the first for retroflexion to march through a word colouring everything in its path, and the second for retroflexion to be largely conditioned by immediate vowel environment. Individual speakers appear to favour one or other tendency and this might be indicative of some dialectal difference (though I have no data on dialect differences as yet). It is still the case, however, that both tendencies can be observed in the speech of any individual.

Rounding also has effects outside of its immediate environment and a rounded syllable may effect some rounding of all the syllables in the word.
The rounded vowel /u/ is often fronted before (and sometimes after) laminal consonants, particularly /y/, with no loss of rounding. For example:

\begin{verbatim}
panu-yu
very-ACC
\end{verbatim}

2.2 Phonotactics

The phonotactics of Panyjima follow a pattern common among Australian languages. With the exception of a few English borrowings with initial /a/, no words can have initial vowels. The only consonants permitted in initial position are the non-apical stops and nasals and the glides. That is:

\begin{verbatim}
p k th j m ng nh ny w y
\end{verbatim}

Consonant clusters cannot occur initially. The following consonants occur in root final position:

\begin{verbatim}
n rr ny l rl ly rr
\end{verbatim}

There is a full set of homorganic nasal/stop clusters as follows:

\begin{verbatim}
mp ngk nt rnt nth nyj
\end{verbatim}

There is only one example of a homorganic lateral/stop cluster in the data. This is /lyj/ which occurs in the one word:

\begin{verbatim}
thurralyji
"bellbird"
\end{verbatim}

Table 3 lists the possible intramorphemic consonant clusters, excluding homorganic nasal/stop clusters.
Table 3: Consonant Clusters

<table>
<thead>
<tr>
<th></th>
<th>p</th>
<th>k</th>
<th>j</th>
<th>n</th>
<th>ng</th>
<th>w</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>np</td>
<td>nk</td>
<td></td>
<td>nm</td>
<td>nng</td>
<td></td>
</tr>
<tr>
<td>rn</td>
<td>rnp</td>
<td>rnk</td>
<td>rnj</td>
<td>rnm</td>
<td>rmm</td>
<td>rng</td>
</tr>
<tr>
<td>ny</td>
<td>nyp</td>
<td>nyk</td>
<td></td>
<td>nym</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>lp</td>
<td>lk</td>
<td>lj</td>
<td>lw</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rl</td>
<td>rlp</td>
<td>rlk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ly</td>
<td>lyp</td>
<td>lyk</td>
<td>lyj</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rr</td>
<td>rrp</td>
<td>rrk</td>
<td>rrj</td>
<td></td>
<td></td>
<td>rrw</td>
</tr>
</tbody>
</table>

Table 4 lists the consonant clusters possible between a root and a derivational suffix.

Table 4: Inter-Morphemic Consonant Clusters

<table>
<thead>
<tr>
<th></th>
<th>p</th>
<th>k</th>
<th>j</th>
<th>m</th>
<th>ng</th>
<th>w</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>np</td>
<td>nk</td>
<td>nj</td>
<td></td>
<td>nt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rn</td>
<td>rnp</td>
<td>rnk</td>
<td></td>
<td>rnm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ny</td>
<td>nyp</td>
<td>nyk</td>
<td></td>
<td>nym</td>
<td>nyw</td>
<td></td>
<td></td>
</tr>
<tr>
<td>l</td>
<td>lp</td>
<td>lk</td>
<td>lj</td>
<td>lw</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rl</td>
<td>rlp</td>
<td>rlk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ly</td>
<td>lyp</td>
<td>lyk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rr</td>
<td>rrp</td>
<td>rrk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Panyjima does not permit a consonant cluster between a root and its final inflection. To avoid instances in which this would otherwise occur, a syllable /pa/ is suffixed to the stem preceding the inflectional suffix. This syllable is also employed to prevent sequences of stem-final/derivation-initial consonant clusters not permissible by Table 4, and to prevent consonant final words. It is common in many parts of Australia for a syllable /pa/ to be added to words which would otherwise end in a consonant. It is much less common for this suffix to be employed to prevent certain inter-morphemic clusters.
2.3 Stress

Stress in Panyjima operates as follows:
1. Primary stress falls on the first long vowel in the word. If there is no long vowel, primary stress falls on the first syllable in the word.
2. If there is a non-initial long vowel occurring in the word, secondary stress will fall on the first syllable. If primary stress falls on the first syllable then secondary stress will fall on either the penultimate or antepenultimate syllable depending on the morphological structure of the word.

The placement of primary and secondary stress on words not having non-initial long vowels can be approximated by the following rules. Firstly, stress is assigned to the syllables in the word according to the morphological structure of the word.

\[
\begin{align*}
\text{a.} & \quad CV \rightarrow \text{CV} / \{+\} \text{CV} \\
\text{b.} & \quad CV \rightarrow \text{CV} / CV \text{CV} \\
\end{align*}
\]

(\(C\) may be a cluster)

Rule a. states that the first syllable in a word or non-monosyllabic morpheme will be stressed. Rule b. states that where there is a sequence of three unstressed syllables, the middle syllable receives stress.

Secondly, primary stress is assigned to the first stressed syllable in the word, and secondary stress to the last stressed syllable in the word. All other stressed syllables retain some slight emphasis which might be called rhythmic stress. Some sample derivations are given below.

<table>
<thead>
<tr>
<th></th>
<th>kampa-jangu-la</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>kámpa-jángu-la</td>
</tr>
<tr>
<td>Stress</td>
<td>kámpajángula</td>
</tr>
</tbody>
</table>
There are a number of exceptions to these rules of stress placement. The exceptions all involve the verbal derivational affix -ma-. For example, we find the word

8a. mîrli-mâ-lärta

where the rules predict

8b. *mîrli-ma-lärta.
Also:

9. kárrara-má-larta  ðkárrará-má-lártà
10. kárrara-má-lku  ðkárrará-má-lku

Notice that not only is -ma- stressed against expectation but other stress does not occur as expected. Thus we need rules to assign stress to -ma- and to prevent stress on suffixes such as -larta. One possible analysis is to assume that -ma- is inherently stressed. Stress will fall in the right places in 8a, 9, and 10 since stress on -ma- will block the operation of rule b. on 9 and 10. The following rule is then required to erase stress on -larta in 8a, and 9:

c. \[ CV \rightarrow CV / CV \]

However, there is one set of counterexamples to this rule. These are cases in which if c. were to operate (after b.), the word would be left with three final unstressed syllables. For example 11 where, by the rules so far constructed, we predict 12.

11. mírnu-ma-nngüíli-nha
12. *mírnu-má-nngulí-nha

Perhaps, then, we need a further rule d. which operates before c.

d. \[ CV \rightarrow CV / \_CVCV(+)CV\]

This rule will erase input to c.. The full sequence of rules is then:

a. \[ CV \rightarrow CV / (\_+CV \]

b. \[ CV \rightarrow CV / CV _CV \]

d. \[ CV \rightarrow CV / _CVCV(+)CV\]

e. \[ CV \rightarrow CV / CV \]

Stress.
An alternative analysis is to have the derivational suffix -ma- attract stress. To start with we can write a rule e. which follows rule a.

\[ \text{e. } \text{maCV} \to \text{maCV} / \_ \_ \_ \text{CV} \{ \theta \} \{ (+) \text{CV} \} \]

This rule copes perfectly well with 8a, 9, and 11 but will not give the correct form for 10. We need a further rule f. ordered after b.

\[ \text{f. } \text{Cyma} \to \text{CVmá} \]

The order of the rules will now be:

\[ \begin{align*}
\text{a. } & \quad \text{CV} \to \text{CV} / \{ \theta \} \quad \_ \_ \_ \text{CV} \\
\text{e. } & \quad \text{maCV} \to \text{maCV} / \_ \_ \_ \text{CV} \{ \theta \} \{ (+) \text{CV} \} \\
\text{b. } & \quad \text{CV} \to \text{CV} / \_ \_ \_ \text{CV} \\
\text{f. } & \quad \text{Cyma} \to \text{CVmá} \\
\end{align*} \]

Stress.

There are just as many rules as in the first formulation but the description is preferable in that we do not need to have -ma- independently stressed in the lexicon. Notice that rule e. collapses rules c. and d. but the formulation does not prevent forms such as 10 from receiving stress by rule b., thus we need the further rule f.

We can now consider the effects of long vowels on stress placement. Where a long vowel occurs in the first syllable in the word the rules will apply with a slight modification to rule a. (CV(V) > CV(V)...). At present there is not enough data to allow a formulation of the stress associated with the three words with non-initial long vowels, however, it is possible to describe the stress associated with the 'passive participle'. A rule g., ordered before a., is required.
2.4 Morphophonemics

In this section I will discuss the particular morphological processes which produce the various allomorphs described in later sections.

2.4.1 Assimilation Rules

a. Assimilation of Lateral/Nasal Clusters

This rule operates to avoid clusters consisting of a lateral followed by a nasal (which are not attested anywhere in Panyjima). The rule appears to operate in two places though it is not clear whether it should be considered a diachronic or a synchronic rule.

a. Where the anaphoric derivational morpheme -1- (see section 3.5.1 below) is followed by the ablative suffix -nguru.

b. Where the I-conjugation marker -l- is followed by a morpheme with an initial nasal. For example:

\[-l-nguli- \rightarrow \text{-nnguli-}\]
\[-l-ma \rightarrow \text{-nma}\]

The rule is simply:

\[\text{lateral} \rightarrow \text{nasal} / \text{nasal}\]

In the case of b. (above) the rule is used to essentially derive an inflectional or derivational morpheme. It does, however, appear to have
some synchronic reality. Some speakers occasionally use a different strategy for avoiding the lateral/nasal cluster of the -1-nguli- suffix. Rather than nasalizing the lateral they transform the nasal into a stop producing -lkuli-. These variants are not very common and though accepted by the speakers who use them, they are often rejected by speakers who always use the more general rule. The existence of the variant form, along with the surprising regularity of the 1-conjugation forms with respect to the 0-conjugation forms (see section 3.7.3 below), suggests that the -1- has to some extent been reanalyzed as a productive conjugation marker.

b. Assimilation of the -nha- and -thu- Derivational Affixes

The two suffixes -nha-, 'proper noun classifier' (see section 3.2.2.1 below), and -thu-, a verbal derivational suffix glossed as 'placement' (see section 3.7.4.4 below), become -na- and -tu- respectively when they follow root final apico-alveolar stops or nasals. The rules are as follows:

\[-nha- \rightarrow -na- / n+\]
\[-thu- \rightarrow -tu- / \begin{cases} t^+ \\ n \end{cases}\]

A rule of geminate reduction is then required.

\[C, C \rightarrow C\]

2.4.2 Word Length Conditioned Allomorphs

The accusative, locative, and instrumental case suffixes have different forms depending on the length of the word to which they are suffixed. The three suffixes have different forms for disyllabic stems than for stems of more than two syllables, or of two syllables where one of the syllables involves a long vowel. The alternants can be summarized as follows:
The inchoative verbalizer also has different forms depending on the length of the root and also on the quality of the root final vowel. There are four forms of the suffix:

- **-yayi-** following disyllabic roots with final /i/.
- **-wayi-** following disyllabic roots with final /u/.
- **-wi-** following roots of more than two syllables with final vowel /u/.
- **-yi-** elsewhere.

If -yi- is assumed to be the basic form we can write the two rules:

a. \(-yi- \rightarrow -wi- /\text{u+}\)

b. \(-Ci- \rightarrow -Cayi- /\emptyset CV(C) CV_++_{[+\text{high}]}\)

An alternative analysis would be to have a basic form -yayi- which is then reduced to -yi- in certain environments. The rules would be as follows:
c. \(-\text{Cayi-} \rightarrow -\text{Ci-} / \begin{cases} \text{CVCa} \\ \text{CV(C)CV(C)CV} \end{cases}\)

d. \(y \rightarrow w / u^{+}\)

This pair of rules might seem a little more plausible in that they delete a syllable rather than adding a syllable, however, they are a little more complex than a. and b. The optional environment is essentially two rules and is thus more complex than rule b.

2.4.3 Nasal Dissimilation

The locative and instrumental suffixes -ngka and -ngku become -ka and -ku respectively when they follow another nasal/stop cluster. The clitics -mpa and -nta do not dissimilate in this environment. This suggests that rather than a general rule of nasal dissimilation for nasal/stop clusters, we need a rule operating only for the velar cluster.

\[
\begin{array}{c|c|c}
\text{nasal} & \text{peripheral} & \text{stop} \\
\text{peripheral} & \text{velar} & \text{velar} \\
\end{array}
\]

\(\rightarrow \emptyset / [\text{nasal}] [\text{stop}] V^{+} / [\text{peripheral}] [\text{velar}]\)

There is some evidence that in Yinyjiparnti the clitic -mpa also dissimilates (Wordick 1979). The change to the rule above would simply involve removing the \([\text{velar}]\) feature specification.

Dixon (1980:216-217) discusses similar rules of nasal dissimilation occurring in Kalkatungu and Dyaru. Unlike in Panyjima and Yinyjiparnti, the Kalkatungu rule deleting a nasal from a morpheme initial nasal/stop cluster when that morpheme follows a stem with a nasal/stop cluster, is not restricted to peripheral clusters.
2.4.4 Accusative Blocking

A rule is required to prevent the accusative case suffix occurring in certain morphologically conditioned environments. Firstly, the -ku accusative case suffix cannot follow the accusative suffixes -ku and -yu or the instrumental suffixes -ku, -ngku and -lu in subordinate clauses. Also the accusative case suffix does not follow the 'accusative' allomorph of the 'proper noun classifier' (see section 3.2.2.1 below). Further, the -ku suffix cannot follow the θ-conjugation participial relative clause marker, -jangu. It is difficult to see how a phonologically conditioned rule could be constructed to avoid the occurrence of -ku in these cases. The best description is probably just the statement of non-occurrence.

2.4.5 Reduction of the Reciprocal Derivational Suffix

The reciprocal derivational suffix -nmayi- is reduced to -yi- following the -ma- causative derivational suffix. A rule can be written as follows:

\[ nma \rightarrow \beta / +ma+_yi+ \]
3. MORPHOLOGY

The sections below outline the basic morphology of the Panyjima language. To the extent that it is impossible to consider certain morphological processes independently of their syntactic and semantic functions, these are discussed in the appropriate sections. These thumbnail sketches are by no means intended as the last word on Panyjima syntax and semantics. The appendix attempts to tie up the loose ends left by the discussions of the syntax of passive, and imperative and hortative verbs but it too should not be considered a complete analysis.

The description of verb morphology, especially derivational morphology, assumes to a large extent that verbs can be categorized on the basis of their transitivity value. As discussed in section 3.7.1 below, this is a simplification. It appears that such a categorization is not only difficult to establish but also does not appear to affect the morphological and syntactic processes of the language to any great degree. For the present purpose of describing the basic morphology of the language, the categorization of verbs on the basis of transitivity is retained.

3.1 Parts of Speech

The following parts of speech are recognised in this thesis:

Nominals: consisting of nouns and adjectives. While these may be distinguished semantically, they cannot be distinguished on morphological or syntactic grounds. Subclasses:
1. a class of human and kinterms which along with proper nouns take certain derivational suffixes.
2. a class of dual kinterms defined semantically and on the basis of their plural inflection.

Pronouns: a closed class of items distinguishing singular, dual, and plural number, and three persons. An inclusive/exclusive distinction operates for non-singular first person. First and second person
non-singular pronouns also code various kin relationships between the speaker and addressee(s), and among the addressees themselves.

Demonstratives: a closed class of items which occur adnominally and indicate the distance of the noun phrase referent with respect to the speaker and the addressee. Special forms of these demonstratives operate anaphorically. That is, they make back reference to a previously mentioned unique referent.

Verbs: these fall into two conjugations and take a set of verb final inflections.

Particles: a set of uninflected items whose semantic domain is the whole clause.

As well as these parts of speech there are bound enclitics, some of which may attach to any part of speech, and some restricted to verb words. These are discussed in section 3.8 below.

3.2 Nominal Morphology

Nominals are inflected for case in accordance with their semantic role and syntactic function in the clause. All nominal constituents of the noun phrase, with the exceptions noted in section 2.4.4 above, are inflected for case. Stem-forming affixes may occur between the nominal root and the case inflection. These are discussed in section 3.2.2 below.

3.2.1 Case Inflections

Case marking in Panyjima is entirely nominative/accusative, however there are ghosts of a previous split ergative case marking system. In all instances, as a result of the morpho-phonotactic constraints discussed in section 2.2 above, the stems to which the case inflections are added are vowel final.
Nominative: -∅

The uninflected form of the stem is used to mark the "agent" or "experimenter" of active verbs, and "goal"/"recipient" or "patient" of passive verbs or of verbs in imperative or hortative mood (see sections 3.7.3, 3.7.4.9, and Appendix 1).

Accusative -yu following disyllabic stems
-ku elsewhere

Accusative marks both patient and goal/recipient arguments of the verb. Thus Fanyjima makes no morphological distinction between "direct" and "indirect" objects of the verb. The functions of the accusative case inflection are discussed in more detail in sections 3.7.1, 3.7.4.6, and Appendix 1. Some simple examples are given below.

14. ngunha-∅ mirlima-lku kurtanpa-ku.
that-NOM spear -PRS bag -ACC
"He's spearing a bug."

15. ngathë mirta mana-nha kapi-yu.
1sgNOM not get -PST fish-ACC
"I didn't get any fish."

16. ngunha-∅ mirta ngaju kuliya-lku, ngatha
that-NOM not 1sgACC hear -PRS 1sgNOM
mirra -ku ngunha-yu marlpa-yu.
sing out-PRS that -ACC man -ACC
"He doesn't hear me, I'll sing out to that man."

Instrumental -ngku following a disyllabic stem
→ -ku where there is a medial nasal/stop cluster.
-lu elsewhere
The suffix is the old ergative/instrumental case marker. In the modern language it marks the agent or instrument of a verb marked as passive. In addition it marks inalienably possessed instruments. Examples 17, 18, 19 and 20 illustrate the use of instrumental with passive verbs. Examples 19 and 20 show different ways of marking the instrument of the action. In 20 the NP is marked with both the Having derivational affix (which is used to mark alienable instruments of active verbs), and the instrumental inflection. By contrast, the instrument NP in 19 has only the instrumental inflection. If an agent were to appear in 19 the instrument (if alienable) would have to be marked with the Having affix. Where no agent appears the Having affix need not occur. There is some semantic difference between sentences 19 and 20 as a result of the different marking of the instrument though at present it is not clear exactly what the difference is. The glosses suggest that 19 is very like certain English agentless passives.

17. ngatha wirnta-nguli-nhà marnta-ku.
   lsgNOM cut -PASS -PST stone-INST
   "I got cut by a stone."

18. ngatha=rla nhantha-rnaanu warlu-ngku.
   lsgNOM=FORE bite -PASSPART snake-INST
   "I got bitten by a snake."

19. njiya-pi parnnga-pi ngarra-rnaanu kaju-ngku.
   this-NOM jark-NOM chop-PASSPART axe -INST
   "This bark was chopped with an axe."

20. panha-pi yukurru-pi kutuma-rnaanu warrkunti-ngarni-lu.
   that-NOM dog-NOM kill-PASSPART boomerang-HAVE-INST
   "That dog was killed, by someone, with a boomerang."

Example 21 illustrates the instrumental inflection used with inalienable instruments. Examples 22 and 27 illustrate two rather unusual uses of
the instrumental on two nominals which are semantically closest to adjectives. Though such examples are rare they are well represented in the corpus.

21. thala-nma jina-ngku jampurrka-lu.
   kick -IMP foot-INST left one-INST

   "Kick it with your left foot."

22. mirta paarnpi -larta, panha-ŋ ngurrinypa-ŋ
   not throw down-FUT that-NOM swag -NOM
   yinti -thu -nma nyarni-ngku.
   go down-PLACE-IMP slow -INST

   "Don't throw it down! Lower that swag down slowly, (with slowness)."

23. ngalikuru wirrpi-ŋu patha-larta ngulannguru-ku
   1plNOM wind -ACC blow -FUT there AnABL-ACC
   palkapalka-nguru-ku kumpa-rta. panu=mpa!
   southwind -ABL -ACC wait -FUT very=EMP
   patha-lku kurilarni mirnu-ngku wayayi-rta-ku
   blow -PRS here from the south know-INST finish-FUT-ACC
   warlpawarlpara-ku.
   cyclone -ACC

   "We wait for the wind to blow from there, from the south. Okay! with it blowing from the south we know that the cyclone is finished."

locative
   -ŋga following disyllabic stems
   → -ka where there is a medial nasal/stop cluster.
   -lŋ elsewhere
This marks location in space or time, and also marks some comitatives. Locative also occurs on a very few nominals where it means something like "to be involved in a controlled stative event associated with N". Speakers differ in their intuitions as to the acceptability of certain of these sentences. For example, sentence 24a appears to be acceptable only for people who spend a lot of time fishing, for whom fishing is a pastime as much as a food gathering activity. Non-fishermen correct 24a to 24b.

24a ngaliyakuru yana-ku kapi-ngka.
   1pl(exc)NOM go -PRS fish-LOC
   "We're going fishing."

24b ngaliyakuru yana-ku kapi-yu mana-rt’a.
   1pl(exc)NOM go -PRS fish-ACC get -FUT
   "We're going to get fish."

25. ngaliyakuru yana-nha wiya-larta ngunha-kutha-ku
    1dl(exc)NOM go -PST see -FUT that -DUAL-ACC
    karipa-kutha-ku wangka-ka-ku.
    -DUAL-ACC word-LOC-ACC
    "We went to see those two men talking."

Ablative

-nguru

This marks movement away from some point in space or time, and the source from which an artefact is manufactured (see example 30 below). Notice that in examples 27 and 28 the ablative suffix is added to a stem already marked with the locative suffix. This is the usual pattern in a number of Australian languages, for example Ngarluma (Simpson 1960) and Pitjantjatjara (Glass and Hacket 1970).

Blake (1977) discusses such cases and notes that instances of "a case marked noun rank shifted to the status of a nominal stem and then case marked again are not uncommon in Australia"(Blake 1977:55). It is clear that Panyjima allows great freedom in this regard. Notice that in
example 28 (below) the NP panha-ngka-nguru-ku "stands in for" the head noun (accusative NP papa-yu in the previous clause). This replacement of the head noun with a location qualifying noun or noun phrase is very common in Panyjima text. Another example is yurlu-ngka-ngarli in 56 (below). In this latter example the locative suffix is followed by the derivational suffix -ngarli-. As is often the case in Australian languages, it is very difficult to strictly categorize suffixes as derivational or inflectional.

26. ngunha-Ø marlpa-Ø paka-lku yurlu-nguru.
that-NOM man-NOM come-PRS camp-ABL
"That man is coming from the camp."

27. karnta-Ø yinti-ku thurlu-ngka-nguru.
tear-NOM go down-ACC eye-LOC-ABL
"Tears falling from their eyes."

28. nyiya-Ø=rla yanti-Ø pili-ngarni-Ø, mirta=rru warli-lku
this-NOM:FORE dish-NOM hole-HAVE-NOM not-NOW hold-PRS
papa-yu=rla. ngatha wiya-lku panha-ngka-nguru-ku
water-ACC:FORE 1sgNOM see-PRS that-LOC-ABL-ACC
panu-warlaru panha-Ø yanti-Ø pili-ngarni-Ø.
very:INTENS that-NOM dish-NOM hole-HAVE-NOM
"This dish has got a hole, it won't hold water. I can see (what has come out) from in it (the dish). For sure, this dish has got a hole in it."

29. jilyanthurri-Ø panti-lha mirlimirli-ku karta-lku
children-NOM sit-PERF paper-ACC poke-PRS
warrungkamu-nguru=mu, pirri-yayi-nha=rru
morning-ABL=THEN afternoon-INCH-PST=NOW
"The kids have been sitting writing on the paper since this morning. Now that it's become afternoon, they're all coming back now. And now the kids in each camp are playing with one another."

\begin{align*}
30. \quad & \text{nyiya-} \beta \text{ kurrjarta-} \delta \text{ warama-rnaanu wirntamarra-nguru.} \\
& \text{This spear is made out of muiga wood.}
\end{align*}

Allative (direct) \(-\text{karta}\)
(indirect) \(-\text{wali}\)

There are two suffixes in Panyjima which can be described as allatives. The first, \(-\text{karta}\), marks motion to some point, the inference being that the point is eventually reached. The second, \(-\text{wali}\), marks motion towards some point, there being no inference that the point will ever be reached.

In everyday speech the \(-\text{wali}\) allative is the most often used. The \(-\text{wali}\) allative is used in questions such as in 32 (below) where use of the direct allative would be considered very prying. \(-\text{wali}\) also occurs as a polite locative in Paathupathu (the avoidance language) and appears frozen in the forms of a number of Paathupathu demonstratives. Examples 31 and 32 illustrate the use of \(-\text{wali}\), and 33 and 34 the use of \(-\text{karta}\).

\begin{align*}
31. \quad & \text{winya-ma-lalha-layi, minaja-larta ngaju=rru, ngaliya} \\
& \text{full-CAUS-PERF=TAS pick up-FUT 1sgACC=NOW 1dl(exe)NOM} \\
& \text{yana-nguma-lku Carnarvonpa-wali.} \\
& \text{go -CONSEQ-PRS } " \text{-ALL}
\end{align*}
"Once he's filled up, he'll pick me up and we'll go off to Carnarvon."

32. tharni-wali nyinta yana-ku=rru?
where -ALL 2sgNOM go -PRS-NOW

"Where are you going?"

33. ngatha nyinku kati-rta mama-ngu-karta
1sgNOM 2sgACC take-FUT Fa -FUC-ALL
maparnpa-ngarni-ku.
magic -HAVE -ACC

"I'll take you to your uncle, (he's) a doctor."

34. ngajupantharri yana-rta ngunha-karta malu-karta
1pl(avoid)NOM go -FUT that -ALL shade-ALL
kunpurlu -karta.
shade tree-ALL

"We'll go over to that shady tree."

Both -wali and -karta are used to mark certain purposive notions. For example, consider 35 below.

35. ngali, mayali, yana-rta jantaru-wali.
1dl(inc)NOM SoSo go -FUT honey -ALL

"We'll go for honey, grandson."

This is quite compatible with the allative sense of the morpheme. To go 'for' something one must presumably go towards it and, of course, it need never be actually attained. The use of the indirect allative seems appropriate. Examples 36 and 37 illustrate the use of -karta with a purposive sense.
36. ngananha-karta nyinta yana-nha=r̩la?
   what -ALL 2sgNOM go -PST=FORE

   "What are you going for?"

37. ngananha-karta nyinta paka-r̩na, jilya?
   what -ALL 2sgNOM come-PST child

   "What did you come for, kid?"

I have only found -karta used with a purposive sense when attached to
the interrogative/indefinite ngananha. In sentences such as those above
the speaker assumes the addressee has arrived with a particular purpose
in mind and thus the use of the direct allative seems appropriate.

Behind -puru

This locative marks a NP, behind the referent of which something is
shielded from perception. The suffix is probably cognate with a suffix
-puru occurring in Pintupi which Hansen and Hansen (1975) call "obscured
by". Some Panyjima examples are:

25. ngunha-ŋ marlpa-ŋ karri-ku mungku -puru.
   that-NOM man-NOM stand-PRS ant hill-BEH

   "That man is standing behind an ant hill."

26. ngaliya mirta kuliya-lku ngarlarla-puru.
   1dl(incl)NOM not hear -PRS noise -BEH

   "We can't hear for the noise."

Example 40 is slightly different.

40. parlkanu-puru小說 yarta-ngarni-ŋ=mu mantu-ngarni-ŋ.
   clouds -BEH $TAS many-HAVE-NOM=THEN meat-HAVE-NOM

   "Through the rains, then, we'll have plenty of meat."
Genitive -tharntu

This morpheme marks alienable possession and benefactive. Example 43 shows the genitive inflection added to the genitive form of a pronoun. The expression "yinimarnaanu kamparnaanu" is apparently a fixed idiom.

41. ngunha-ŋ milyula- rna nganinha- ku walympala- tharntu- ku. that-NOM steal -PST something-ACC whiteman-GEN -ACC

"He stole something of the whitefella's."

42. thanarta=rru ngatha mana- rta=rra mantu- yu=rra
when =NOW 1sgNOM get -FUT=FORE meat-ACC=FORE jilyanharri- tharntu- ku? children -GEN -ACC

"Now when am I going to get meat for those kids?"

43. ngatharntu- tharntu mimi- tharntu nyiya jilya. 1sgGEN -GEN MoPro-GEN this child ngaliya panti- ku yini- ma - rnaanu kampa- rnaanu. 1d(exe)NOM sit -PRS name-CAUS-PASSPART burn -PASSPART

"This kid is my uncle's child. The two of us are cousin brothers (cross cousins)."

Cause -mari

This marks the, typically inanimate, cause of the state experienced by the nominative marked NP in the clause. The only exceptions I have found to the requirement that the cause be inanimate are examples such as 46 below.

44. ngatha karrara-ŋ kari- mari. 1sgNOM sick -NOM grog-CAUS
"I'm crook from the grog."

45. ngatha winya-ŋ=rru mantu-mari.
   1sgNOM full-NOM:NOW meat-CAUS

"I'm full of meat."

46. ngatha ngunha-ngku yawarta-lu thala-ngguli-nha.
   1sgNOM that -INST horse-INST kick -PASS -PST

ngunha-mari yawarta-mari thala-ngguli-lha.
   that -CAUS horse -CAUS kick -PASS -PERF

"I got kicked by a horse. I got a kick from a horse."

Example 46 is particularly interesting. Notice that in the second clause the agent is marked with the -mari suffix rather than with the usual instrumental suffix. At present I have no convincing explanation for this. It appears that when the agent is marked with -mari the control of the agent over the event is seen as diminished. To some extent the action is unintentional. This would certainly fit the more widespread use of -mari to mark inanimate cause.

Indirect Cause -ngaraŋa

This suffix marks a NP as the indirect cause or reason for the actions of the agent. The suffix is clearly cognate with the Yinyjiparnti indirect causal suffix -ngaala. In fact, articulation of the Panyjima suffix is often very like that of the Yinyjiparnti suffix. The sequence /ara/ is often heard as a double articulated vowel and sometimes as a long vowel /aa/. However, this long vowel never attracts primary stress. Two examples of the use of the -ngaraŋa suffix are given below.

47. paŋharra-kutha-ŋ pinyerri-ku palya-ngaraŋa.
   jealous -DUAL-NOM fight-PRS woman-INAUS

"Those two jealous fellas are fighting over the woman."
48. ngananha-ngarala=mpa=rra paja-yi -ku ngalikuruku something-INCAUS=EMP:DUB wild-INC-PRF 1pl(inc):ACC
nhangu-yu panti-jangu yurlu-ngka-ku. here-ACC sit -REL camp -LOC-ACC
"He's wild with us sitting here in camp over something, (I don't know what)."

3.2.2 Nominal Derivational Suffixes

A number of suffixes can occur between the nominal root and its final inflection. In this section I will describe these derivational suffixes which involve no change in the syntactic function of the nominal root. That is, these suffixes attach to nominals and produce nominals. Verbalizing processes will be discussed under the heading of verbal derivational processes.

There appear to be no productive processes deriving nominals from verb stems in Panyjima, though future work may well reveal that such processes existed in an earlier stage of the language. To a large extent, the quite versatile syntax of the language, including a number of participial constructions, shoulders the burden of function carried by nominalization in other languages.

3.2.2.1 Proper Noun Classifiers

(Nominaive) -nha-

(> -na- following an alveolar nasal

(Accusative) -ngu-

These two suffixes are added to proper names when these are in nominative or accusative case frames.

It is possible that the -nha suffix performs much the same functions in Panyjima as it does in some of the Western Desert dialects. Glass (1980) points out that the Ngaanyatjarrna suffix -nya has a number of functions. Firstly it marks absolutive case on proper nouns, the definite interrogative, on demonstratives, and on relative and
nominalized clauses. Secondly, it marks accusative case on first and second person pronouns. In addition, -nya is suffixed to "a proper name or relationship term which is called out in a type of joyful greeting" (1980:39), and can be suffixed to a nominal (whose normal absolutive case is zero) as a marker of definiteness (see Glass 1980 for discussion).

An alternative analysis might assume that at an earlier stage of the language, -nha was an accusative marker on certain nominals which has now become stranded in nominative position as a result of the change from a split ergative case marking system to the present accusative system. Glass (1980) treats the Nganyatjarra suffix -nya as an allomorph of accusative case but I prefer to treat the Panyjima suffix as derivational. The reasons for this are twofold. Firstly, while -nha-obligatorily occurs on proper names in nominative position, it can also occur on (singular) kinterms and on some human nominals where the latter are being used as proper names. There is clearly some system to the occurrence or non-occurrence of -nha- on kinterms. Speakers are usually very clear which variant is appropriate in any particular instance. The conditioning of the occurrence of -nha- is apparently not related to the semantic role of the NP in nominative position. Secondly, the suffix -nha- is very closely bound to the nominal root. It precedes all other derivational suffixes and cannot follow them. If the suffix occurs it must directly follow the root.

I have treated the -ngu- suffix as derivational for similar reasons (Wordick 1979, and Simpson 1980, treat the -ngu- suffix in Yinyiparnti and Ngarluma respectively, as an allomorph of accusative case). Again, Panyjima speakers are generally very clear as to the situations in which -ngu- may or may not be used. The suffix is very tightly bound to the nominal root and cannot be preceded by any other derivational suffix. The case for -ngu- being a derivational affix is considerably weakened by the fact that it cannot be followed by the usual accusative case inflection. However, this may be due to the same morphophonemic felicity condition which blocks accusative marking of instrumental and the O-conjugation participle in subordinate clauses (see section 2.4.4 above). Also, in that the proper nominal classifier is marked for accusative versus nominative case, which is in itself unusual, the marking of accusative on -ngu- is redundant. This explanation is, however, a little ad hoc. The suffix -ngu- is most likely a reflex of
an earlier dative case inflection. A -ngu allomorph of dative case is found in a number of languages. It also occurs as a genitive marker in a number of languages. One interesting example is the dative allomorph -ngu in Djiwarli. In this language, -ngu is the form of the dative case inflection following the first person singular possessive derivational affix -ju-. Thus, in this language also, there is some relationship between -ngu and possession. The derivational suffix -ju- does not occur in Panyjima though the forms of a few kinterms suggest it may have once been used. It is remotely possible that -ngu- (and -nha-) in Panyjima are used in situations where the kinsman denoted by the term is related in a particular way to the subject of the clause, though this requires extensive checking.

There is evidence that a syllable -ngu- has had some derivational effect in the Panyjima lexicon. A number of clear examples are given below.

49. kunyanngu "sleepy fella" kunyanpa "asleep"
   jinangu "on foot, walking" jina "foot"
   walharnungu 'tree type' walharnpa "brush"
   kamungu "hungry" kamu "hungry"

Two interesting examples of lexical derivation involve the shifting of two nominals into the class of proper nominals. These are:

50. ngarlu-nha/-ngu "flagon" ngarlu-ø/-yu "guts"
   kupija-nha/-ngu "beer bottle" kupija-ø/-ku "little"

It is possible that the -ngu suffix apparent in the forms in 49 is related to the derivational suffix -ngu-.

3.2.2.2 Number

(Dual on all nominals, including demonstratives) -kutha
(Plural) -ngarli-
(Plural on demonstratives) -jirri-

These are the productive number affixes in the language. Examples of their use can be found throughout the thesis and need not be further illustrated here.
Idiosyncratic Plurals

A number of the Panyjima words collected to date have plural stems which in most cases appear not to be derived by productive morphological processes. However, the few words collected so far do show what might be some previously productive derivational plurals which have become frozen. The plurals are discussed in turn below.

-ntarri-

This suffix appears on the two words palya, "woman", and jilya, "child". In addition it appears in the word jinintharri, "old people", but in this case I have not identified a root jini-. The suffix is clearly cognate with the productive plural marker -nyjarri- occurring in the Mantharta languages Djiwarli and Dhargari (Austin 1980c). My informant once rejected the plural palya-ngarli (formed with the productive plural suffix) on the grounds that it was impolite, and on another occasion produced 51 (below) with apparent double plural marking. At present I have no explanation for this.

51. ngunha-ŋ marla-pi panti-ku wi-ti-pl -1ku
that-NOM man -ROM sit -PRS play-PROC-PRS
palyan-tharri-ngarli-ku yarnta-warntura-la.
women -PLURAL-ACC day -EACH -LOC
"That man sits around flirting with all the women every day."

-rtarri-

This suffix occurs on just two words:

wurmna wurmartarri "puppy, puppies"
wurta wurtartarri "emu chick(s)"
This suffix appears on four words:

<table>
<thead>
<tr>
<th>Word</th>
<th>Suffix</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>kupija</td>
<td>kupijarri</td>
<td>&quot;little, little ones&quot;</td>
</tr>
<tr>
<td>kurtulhu</td>
<td>kurtulharri</td>
<td>&quot;boulder(s)&quot;</td>
</tr>
<tr>
<td>warrapa</td>
<td>warraparri</td>
<td>&quot;grass, an expanse of grass&quot;</td>
</tr>
<tr>
<td>wirntamarra</td>
<td>wirntamarrarri</td>
<td>&quot;mulga, a stand of mulga&quot;</td>
</tr>
</tbody>
</table>

This suffix, and the -rtarri- suffix, may be related to the -ntharri- plural in some way. Notice that -ntharri- and -rtarri- occur on disyllabic roots while -rri- occurs on words of more than two syllables. It may be possible (and this need not be an alternative analysis) to relate the -rri- suffix to a plural allomorph, -rti-, occurring in the Mantharta languages (see Austin 1980c). However, in these languages -rti- can occur on disyllabic roots. The examples above suggest that -rri- is some sort of 'generic' plural.

-kuRU-

There are two words in the corpus which have a plural formed by the addition of a suffix -kuRu- (where /R/ is either /r/ or /rr/).

<table>
<thead>
<tr>
<th>Word</th>
<th>Suffix</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>jirri</td>
<td>jirrikuru</td>
<td>&quot;prickle, expanse of prickles&quot;</td>
</tr>
<tr>
<td>paru</td>
<td>parukurru</td>
<td>&quot;spinifex, expanse of spinifex&quot;</td>
</tr>
</tbody>
</table>

I have assumed that the two suffix forms -kuru- and -kurru- are related though this needs verification. Notice that the two words which show this suffix both have a medial rhotic. In both cases, the rhotic appearing in the suffix is the 'opposite' of that occurring in the root. Wordick (1979) describes a word structure constraint operating in Yinyjiparnti whereby a sequence of two like rhotics is not permitted if separated by a morpheme boundary. Where such sequences would otherwise occur, one of the rhotics changes to the complementary rhotic. It is possible that a similar process of rhotic dissimilation is operating in the -kuRu- suffix though in this case the sequence of rhotics is separated by a consonant.
Again I have assumed one suffix though two shapes occur. The four examples show quite clearly the process of rhotic dissimilation.

<table>
<thead>
<tr>
<th>Word</th>
<th>Form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>pirarrpa</td>
<td>pirarrara</td>
<td>&quot;blackheart tree&quot;</td>
</tr>
<tr>
<td>piyara</td>
<td>piyararra</td>
<td>'tree type'</td>
</tr>
<tr>
<td>punara</td>
<td>punarrara</td>
<td>&quot;bloodwood&quot;</td>
</tr>
<tr>
<td>punarangu</td>
<td>punararra</td>
<td>&quot;Kingsmill's mallee&quot;</td>
</tr>
</tbody>
</table>

Notice that the plural form of pirarrpa involves an epenthetic vowel /a/ added after the root final /rr/ and the -ra- suffix. This might suggest that -Ra- is the non-syllabic stem allomorph of another frozen plural affix, possibly even of -kuRu-. Certainly much more data is required before these suffixes can be confidently reconstructed.

3.2.2.3 Both -pula-

An example of the use of this suffix is 52 below.

52. ngatha yana-nha mama-nha-pula-ku wiya-larta.

"I went to see both my uncles."

3.2.2.4 Each -warntura-

This is glossed variously as "each" or "ever," but, as examples 55 and 56 (below) show, it is also used as a plural (of sorts) for events which by their nature recur. Perhaps the best description of the meaning of this morpheme is 'a number of items treated individually and sequentially'.

53. nhupalu yana-rta wiya-larta winmil-warntura-ku.

"You two go and check each of the windmills."
54. *kari-ngka=kanu=rru panti-ku yarnta-warntura-la.*
grog-LOC =ONLY=NOW sit -PRS day -EACH -LOC
"They just sit around on the grog each day."

55. *ngunha-O nyurna-Ø yana-ku warnku-warntura-ku*
that=NUM snake=NOM go-PRS turn -EACH -ACC
wantha-1ku.
leave -PRS
"That snake's going along leaving a lot of turns,
each in succession, behind him."

56. *kuliya-lalha=layi wangka-yu thaa-rna-ku -ku*
hear -PERF =TAS word -ACC send-PASS=PART-ACC
wilarra-warntura-ku, yurlu-ngka-ngarli-Ø
month -EACH -ACC camp -LOC -PLURAL-NOM
karnt-ka-ngarli-Ø yurlu-ngka-warntura-Ø.
tear-LOC-PLURAL-NOM camp -LOC -EACH -NOM
"Having heard the word that they've been sent away
for a number of months (in succession), the people
in the camp are all in tears, each person."

3.2.2.5 Having

*ngarni-*

This affix marks alienably possessed instruments, some comitatives, and
the common Australian HAVING function (see Dixon 1976:Topic A for
discussion). Example 57 illustrates the difference between the marking
of alienable and inalienable (INST) instruments.

57. *mirta katama-lorta karnti-ngarni-Ø=r1a, katama-rma*
not hit -FUT stick -HAVE=NOM=FOHE hit -IMP
purlpi=rla mara-ngku
want =FORE hand-INST

"Don't hit him with a stick, hit him with your hand if you want."

58. murrulu-Ø panha-Ø parukurru -ngarni-Ø.
rise -NOM that-NOM spinifex(pl)-HAVE-NOM

"That rise has mobs of spinifex."

59. mama-Ø panti-ku manyka-kutha-ngarni-Ø.
Fa-NOM sit -PRS son -DUAL -HAVE-NOM

"That father's sitting with two of his sons."

3.2.2.6 Privative -pati-

This suffix generally marks a lack on the part of the head nominal of the phrase, of the referent of the -pati- marked nominal. In some cases the privative suffix occurs on verb roots deriving a nominal the sense of which is 'a state characterized by the non-occurrence of the activity or state denoted by the verb'. The nominal so derived is usually marked with the locative inflection. On L-conjugation verbs the form of the privative suffix is -lpati (see example 62 below).

60. ngatha mantu-pati-Ø.
1sgNOM meat -PRIV-NOM

"I've got no meat."

61. panha-Ø jilya-Ø mirta=warlaru panti-ku ngaji-pati-la.
that-NOM child-NOM not=INSHIS sit -PRS cry -PRIV-LCC

"That kid never sits without crying."

62. ngunha-Ø mirta panti-hta purrpa-lpati-la.
that-NOM not sit -FUT shout -PRIV-LOC
"That one won't sit without outing."

3.2.2.7 Associative -nyungu-

This suffix marks the place with which a person animal or thing is generally associated.

63. nyiya-Ø=ria waluju-nyungu-Ø.
   this-NOM=FORE west -ASSOC-NOM

"This fella is a westerner."

64. tharni-nyungu-Ø panha-Ø maripa-Ø?
   where -ASSOC-NOM that-NOM man-NOM

"Where does that man belong?"

3.2.2.8 Unifying -karra-

This suffix appears to function as a conjunction marker of some sort. The suffix is added to a nominal to show that the referent of that nominal is being considered to be 'one' with the head of the noun phrase. In some sense the nominals so conjoined are considered as one unit and so I have used the gloss "unifying" for this suffix. For further discussion see section 3.3.3 below.

65. yika=rru wantha-nmayi-rta=rru, ngajupantharri
   finish=NOW leave-RECIP-FUT=NOW 1pl(avoid)=NOM
   malu-karra-Ø=rru wiya-nmayi-rta pirri -ngka=rru
   shade-UNI-NOM=NOW see-RECIP-FUT afternoon-LOC=NOW
   muthumuthu-la=rru.
   cool -LOC=NOW

"Stop it now. We'll split up and we'll see each other in the shade in the cool of the afternoon."
66. ngunha-ŋ jarta -nha-ŋ kulu-karra-ŋ panti-ku.
that-NOM old woman-PNC-NOM louse-UNI-NOM sit -PRS
"That old woman has got lice, is lousy."

67. ngunha-ŋ kuptu-karra-ŋ jilya-ŋ.
that-NOM crawling-UNI-NOM child-NOM
"That kid's crawling now."

68. ngatha panti-nha ngunha-jirri-lu karnku-nguli-ku
1sgNOM sit -PST that-PLURAL-INST keep -PASS -PRS
manartu-ŋ parlkapi-karra-ŋ witi-ngka-ŋ
good -NOM coroborree-UNI-NOM play-LOC-NOM
karnku-nguli-lha.
keep -PASS -PERF
"I lived well being kept by those people, being kept while playing all the coroborree songs."

3.2.2.9 AND

This is the simple conjunction used to conjoin two nominals in the noun phrase. While in Panyjima this conjunction is clearly a derivational suffix, in Yinyjiyipari it appears to be an independent particle (see Wordick 1979). Presumably an original particle has become bound to the nominal stem. The conjunction can occur on either of the words so conjoined and may occur on more than one. Typically, only two nominals are conjoined using this suffix. Where three nominals are conjoined, two take the suffix -muntu-. There are no examples in the corpus of more than three conjoined nominals in the one noun phrase.

69. nyiya-kutha-ŋ pulku-muntu-ŋ karntarra-muntu-ŋ
this -DUAL-NOM wax -AND-NOM sinew -AND-NOM
"Put away this wax and sinew belonging to the spear point (which have been used to attach the spear point)."

"That man is keeping my spear and boomerang."

This derivation is also used to conjoin two nominals. Unlike the -muntu- conjunction, -minyjarnu- can only be attached to one of the, typically two, nominals occurring in the noun phrase. While with the -muntu- conjunction the conjoined nominals are all of equal importance, this is not true of the -minyjarnu- conjunction. There is some sense in which the -minyjarnu- marked nominal is subordinate to the unmarked nominal in the noun phrase. The form of the conjunction looks suspiciously like a verb root minyja-l with the participle -rnu attached (I have, however, found no cognate verb root). This extremely speculative analysis, if borne out, would explain the subordinating effect of the -minyjarnu- conjunction. Presumably the verb became attached to the nominal in much the same way as has happened with the -muntu- conjunction.

"The woman's going off for fish, kids and all."
miyinma -larta juju -ngarli-tharntu-ku
provide for-FUT old man-PLURAL-GEN -ACC

jarta -ngarli-minyjarnu-ku, kamungu-∅ thanar.marra.
old woman-PLURAL-AND ALL -ACC hungry-NOM 3plNOM

"I'll go hunting for meat to provide for the old men, women and all. Those people are hungry."

ngatha wiya-rna mangkurutu-nyungu-ku
'sgnNOM see -PST Fortescue-ASSOC-ACC

pathara-minyjarnu-ku yinyjurrpa -ku.
wild plum-AND ALL-ACC cork bark fruit-ACC

"I saw cork bark tree fruit, and wild plums, all the fruit you find around the Fortescue country."

3.2.2.11 NMARRA -nmarra-

There is one further suffix which should be mentioned. This is the suffix -nmarra-. The main function of this suffix appears to be to derive nominals of the Paathupathu avoidance language. As such it is extremely productive, a few examples are given below.

<table>
<thead>
<tr>
<th>everyday Panjima</th>
<th>Paathupathu</th>
</tr>
</thead>
<tbody>
<tr>
<td>palya</td>
<td>palyanmarra</td>
</tr>
<tr>
<td>murruru</td>
<td>murrurnarra</td>
</tr>
<tr>
<td>miji</td>
<td>mijinmarra</td>
</tr>
<tr>
<td>maya</td>
<td>mayanmarra</td>
</tr>
</tbody>
</table>

The suffix occurs on a few nouns of the everyday language where it appears to have had some derivational effect. Two examples are:

puka "rotten" pukanmarra "rotten throughout"
kata "scrub" katanmarra "very dense scrub"
3.3 Kinterm Duals and Plurals

3.3.1 Reference Kinterms

Panyjima has a set of kin reference terms which describe a group of two or more people in terms of the kinship relations between people in that group. Table 5. (below) sets out the dual and plural forms of some of these kin terms. The singular ego-based reference terms from which the duals and plurals are formed are also given where this is known. Notice that the plural forms involve the addition of the suffix -ngara to the dual stem.

Table 5 : Kin reference terms; duals, plurals, and singular sources

<table>
<thead>
<tr>
<th>Dual</th>
<th>Plural</th>
<th>ego based</th>
</tr>
</thead>
<tbody>
<tr>
<td>brother</td>
<td>kurtarra</td>
<td>kurta</td>
</tr>
<tr>
<td>sister</td>
<td>thurtuwarra</td>
<td>thurtu</td>
</tr>
<tr>
<td>brothers-in-law</td>
<td>kumpaliyarra</td>
<td>kumpali</td>
</tr>
<tr>
<td>sisters-in-law</td>
<td>kananyuwarra</td>
<td>kananyuwarra</td>
</tr>
<tr>
<td>spouse</td>
<td>nyuparra</td>
<td>nyupa</td>
</tr>
<tr>
<td>MoMo/DaDa</td>
<td>kantharrarra</td>
<td>kantharri</td>
</tr>
<tr>
<td>MoFa/DaSo</td>
<td>mapujiyarra</td>
<td>mapuji</td>
</tr>
<tr>
<td>FaFa/SoSo</td>
<td>mayilarra</td>
<td>mayali</td>
</tr>
<tr>
<td>FaMo/SoDa</td>
<td>kaparlarra</td>
<td>kaparli</td>
</tr>
</tbody>
</table>

The examples below illustrate the use of some of the dual and plural reference terms.
74. palya-kutha-o paka-lku thurtuwarra-o
two sisters-NOM come-PRS
woman-DUAL-NOM
"Those two sisters are coming."

75. ngunha-kutha-o mayilarra-o yana-ku-o warraparri-la-o
grass(pl)-LOC-NOM go-PRS-NOM boy+FaFa-NOM-DUAL-NOM
that-DUAL-NOM
nhantha-nguli-jara parnka-ku
bite -PASS -MIGHT lizard-INST
"Those two mayalis going in all that grass might get bitten by a lizard."

76. mirnu-wayi-ku ñingga-ka kantharrarrangara-o paka-lku
know -INCH-INC NOM knows-NOM child+2MoMo-NOM-DUAL-NOM come-PRS
"This kid's learning (to walk), coming with his grannies."

77. ngatha yana-rta wangka-rta kananyuwarra-ku
1sgNOM go -FUT tell -FUT 2 Sis-in-law-ACC
nyaamparrpi-larta-ku
hurry up -FUT -ACC
"I'll go and tell those two sisters-in-law to hurry up."

It is clear that the dual and plural forms in examples 74 to 77, unlike the singular reference terms, are not ego-based. The choice of kinterms is based entirely on the relationship between members of the group. No reference is made to the relationship between the speaker and members of the group. Notice that while the dual terms are all to some degree reciprocal, the plural terms are not all reciprocal. In example 76 the term kantharrarrangara refers to a child accompanied by two women who are both classified as his mother's mother. The relationship between the child and each of the women is reciprocal (each would call the other kantharri), but the relationship between the two women is obviously not the same as that between the child and either of the two women.
3.3.2 Kinterms of Address

In contrast to the duel and plural reference terms, the kinterms used to address groups of people are generally ego-based. That is, these terms not only code the relationships between members of the addressed group but also the relationships between the speaker and members of that group.

Table 5 (below) lists the address terms used by a male speaker of the panaka section in addressing two other males. I have listed the terms with respect to the section membership of the two addressees. The second column of the table gives some examples of pairs of the speaker's kinsmen whom the speaker would address using the term (Fn. 7).

Table 5: Kin address terms for a male speaker of the panaka section, to two male addressees

<table>
<thead>
<tr>
<th>Sp. &gt; Addrs.</th>
<th>Examples of speaker's kin</th>
<th>Address term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pa &gt; Pa&amp;Pa</td>
<td>Bro&amp;Bro, Bro&amp;Fafa</td>
<td>kurtarra</td>
</tr>
<tr>
<td>Pa &gt; Mi&amp;Mi</td>
<td>Fa&amp;Fa, Fa&amp;So</td>
<td>kurtarra</td>
</tr>
<tr>
<td>Pa &gt; Pa&amp;Ka</td>
<td>Bro&amp;Bro-in-law</td>
<td>kalhangkarra</td>
</tr>
<tr>
<td>Pa &gt; Ka&amp;Ka</td>
<td>MoBro&amp;MoBro-in-law</td>
<td>partangarra</td>
</tr>
<tr>
<td>Pa &gt; Pa&amp;Mi</td>
<td>Bro&amp;Fa</td>
<td>narmtiarra</td>
</tr>
<tr>
<td>Pa &gt; Pa&amp;Pu</td>
<td>Bro&amp;MoBro</td>
<td>kurntalkarra</td>
</tr>
<tr>
<td>Pa &gt; Ka&amp;Mi</td>
<td>Bro-in-law&amp;Fa</td>
<td>kurntalkarra</td>
</tr>
<tr>
<td>Pa &gt; Pu&amp;Pu</td>
<td>MoBro&amp;Fa-in-law</td>
<td>yirtangkarra</td>
</tr>
<tr>
<td>Pa &gt; Ka&amp;Pu</td>
<td>Bro-in-law&amp;Fa-in-law</td>
<td>punhayarra</td>
</tr>
<tr>
<td>Pa &gt; Mi&amp;Pu</td>
<td>Fa&amp;MoBro</td>
<td>jartuntarra</td>
</tr>
</tbody>
</table>

Although there are ten possible combinations of the four sections among the speaker and two addressees, only eight distinct terms are used. A panaka man speaking to two other panaka men uses the same term as he would speaking to two milhangka males. That is, one term is used to address brothers of the speakers patrimoiet. A panaka man also uses the same term in addressing a karimarra man and a milhangka man as he does in addressing a purungu man and a panaka man. That is, one term is
used to address two disharmonic males who are not in the same patrimoieties.

The fact that there are just eight terms might suggest that we look for just three distinctive features to describe the term. Clearly two of the features would be [+-- disharmonic] and [+-- affinal]. It is not at all clear, however, what third feature might be invoked to uniquely define the categories coded by the address terms.

If we look at the two features [+-- disharmonic] and [+-- affinal] with respect to Table 5 we find that we have to use the features not only to describe the relationship between the addressees, but also to describe the relationship between the speaker and one or other of the addressees. For example, to distinguish punhayarra (Pa > KaPu) from marntiyarra (Pa > PaMi) we have to use the fact that in the former case the addressees are [+affinal] with respect to the speaker while in the latter case the addressees are [-affinal] with respect to the speaker.

Using this approach we can arrive at a choice type diagram similar to Figure 2. (Fn. 8).

Figure 2: Feature analysis of kin address terms

<table>
<thead>
<tr>
<th>addressee ↔ addressee</th>
<th>speaker ↔ addressee</th>
<th>dual term</th>
</tr>
</thead>
<tbody>
<tr>
<td>-affinal</td>
<td>-affinal</td>
<td>kurtarra</td>
</tr>
<tr>
<td>-affinal</td>
<td>+affinal</td>
<td>partangarra</td>
</tr>
<tr>
<td>-affinal</td>
<td>+affinal</td>
<td>yirtangkarra</td>
</tr>
<tr>
<td>-affinal</td>
<td>+affinal</td>
<td>jartuntarra</td>
</tr>
<tr>
<td>-affinal</td>
<td>-affinal</td>
<td>marntiyarra</td>
</tr>
<tr>
<td>+affinal</td>
<td>+affinal</td>
<td>punhayarra</td>
</tr>
<tr>
<td>+affinal</td>
<td>+affinal</td>
<td>kurntalkarra</td>
</tr>
</tbody>
</table>
The examples below illustrate the use of the kin address terms.

78. nyiya-kutha-Ø yirtangkarra-Ø mannta-yu mirnu-ma-rnaanu this -DUAL-NOM 2Si-in-law-NOM hill -ACC know-CAUS-PASSPART

ngajuparta-lu.

dl(avoid)-INST

"These two brothers (our sons-in-law) were shown the hill by us two."

79. ngajupanthurri manntiyarrangara-Ø jammpu -ngarl1-Ø

pl(avoid)NOM boy+2 fathers -NOM left-handed-PLURAL-NOM

"We're all left-handed."

80. nyinkungarni kurntalkarra-Ø yana-rta kumpa-rta

2dl(avoid)NOM Bro + MoBro-NOM go -FUT wait -FUT

ngunyji warnku-wayi-jangu-la wuntu-ka there bend -INCH-REL -LOC river-LOC

"You two go and wait down there where the river bends."

Figure 2 will produce the plural terms as well as the dual terms. For example, given a male panaka speaker addressing a group consisting of two karimarra men, two milhangka men, and one purungu man, which term will be used? Firstly we ask: "Is any one of the addressees disharmonic to any other one of the adresseses?" The answer is yes, since the karimarra men are disharmonic with respect to both the milhangka men and the purungu man. Next we ask: "Is any one of the addressees affinally related to any other one of the addressees?". Again the answer is yes, since the milhangka men are affinally related to both the karimarra men and to the purungu man. Thus the appropriate address term is kurntalkarrangara.

The terms in Table 6 are not used only as address terms. They can be used as reference terms where the speaker wishes to point out to the addressee that he (the speaker) is aware of the relationship between
himself and the referents of the term. The reader will no doubt have noticed that the term used to address brothers of the speaker's patrimoity, kurtarra, is exactly that term which is used to refer to a group of brothers (see Table 5 above). In a sense then, this term is devoid of speaker reference. The term only indicates the speaker/addressee relationship when it is used as an address term and is thus contrasted with the other address terms listed in Table 6. This lack of speaker reference when addressing or referring to brothers of one's own patrimoity seems to reflect the fact that the relationship between the referents of the term and the speaker, is relatively close. There are very few restrictions on the behaviour appropriate to these relationships. It is true that a man must treat his father's brothers with a degree of respect but this restriction is not so institutionalized as to require an address term distinct from that which he uses to his brothers. Nor does it require an address term distinct from the general reference term for brothers.

3.3.3 Analysis of Dual Terms

In this section I will discuss the forms of the dual kin terms. I have not been able to find, in Panyjima, a corresponding singular form for every one of the dual kin terms, though cognates can be found in Yinyiparnti (Wordick 1979) and as far away as in Nyangumarda (O'Grady and Mooney 1973). Further, as discussed below, it is not clear that a productive dual suffix can be isolated for the set of kin duals. These two facts suggest that in Panyjima, at least, the dual terms are fossilized forms. The plural forms, however, quite clearly show an augmenting suffix, -ngera, added to the dual forms.

The forms in 81 (below) suggest a dual suffix with the allomorphy stated in 82 (below).

<table>
<thead>
<tr>
<th>dual form</th>
<th>singular</th>
</tr>
</thead>
<tbody>
<tr>
<td>kurtarra</td>
<td>kurta</td>
</tr>
<tr>
<td>nyuparra</td>
<td>nyupa</td>
</tr>
<tr>
<td>thurtuwarra</td>
<td>thurtu</td>
</tr>
<tr>
<td>yarlpuwarra</td>
<td>yarlpu</td>
</tr>
</tbody>
</table>
kumpaliyarra  kumpali
mapujiyarra   mapuji

82. dual \[\rightarrow \begin{array}{c}
\text{-rra-} \\
\text{-warra-} \\
\text{-yarr-} \\
\end{array}\frac{a}{u}\frac{i}{i}\]

However, the forms in 83 do not fit rule 82.

83. kantharrarra  kantharri
mayilarra      mayali
kaparlarra     kaparli
punhayarra     punhayi
kamayarra      kamayi

These forms suggest a rule 84 operating on the output of rule 82.

\[\text{iyr} \rightarrow \begin{array}{c}
\text{nasal} \\
\text{lateral} \\
\text{rhotic} \\
\end{array}\]

I think it is clear that 84 is not a rule in the synchronic grammar. The form kumpaliyarra does not fit 84 as stated thus arguing that the rule is not a word structure constraint nor a morphophonemic rule. A number of other words in the language fit the structural description of 84 but do not undergo the change. For example:

5a. kariya-I  "to straighten something"
b. kuliya-I   "to hear, listen"
c. thurri-yayi-Ø  "to get out of the way"

I do not think there is any non-ad hoc way of rewriting 84 to account for kumpaliyarra. Unless kumpaliyarra is to be treated an an exception to the rule, the rule must be considered to be a diachronic rule with no synchronic reality.

One further piece of evidence appears in 83 above. Notice that the form mayalarra has the singular complement mayali. If the rules were to be considered synchronic, they would have to be modified to account for
this alternation in the stem. However, the alternation is most probably the result of historical change. While Panyjima has mayali as the singular term, other languages of this area, for example Ngarluma, and the Kanyara and Mantharta languages, have the form mayili (mayidi in the d dialect of Dhargari) (Wordick 1979, and Austin 1980a). It is possible that Panyjima also once had the form mayili, at which time the dual suffix may have been productive, but has since altered the form to mayali (Tinyinjiparnti has maali which may be a lenited form of mayali).

The dual form kurntalkarrn can be compared with the forms kurntal-ps, "daughter", and kurnta-Ø, "to be ashamed", thus suggesting that the form of the old dual on consonant final roots was -karra. This suffix is then identical in form with the 'unifying' suffix described in section 3.2.2 (above), however the derivational affix is not restricted to dual reference and does not have the allomorphic variation apparent with the historical dual. Evidence from two other Western Australian languages suggests that the two -karra suffixes may be related.

Firstly, Glass reports (pers. comm.) that the Ngaanyatjarra morpheme -karra (with allomorph -rra/V_) can be used to mark a unity of a person with some object. Though she has no examples to hand, since the suffix is quite e, the English sentence 86 reflects the way in which the suffix (on 'branch') might be read.

86. "The child fell out of the tree, branch and all."

Elsewhere, the suffix occurs on kinterms and for the moment Glass calls it a 'coupler', after Marsh (1976).

Nyangumarda, like Panyjima, has a set of kinterm duals and plurals. O'Grady and Mooney (1973) identify a number of dual forming affixes as well as a number of plural forming affixes and processes. One of these dual affixes is -karra (with allomorphs -rra, -rrra, and -yirri) which generally occurs with terms for which the speaker's relationship to the persons denoted is significant. O'Grady and Mooney caution against making a strict 'number' interpretation of the kin duals and plurals:

although dual terms in spontaneous utterances generally seem to denote two people, kurntal-karra (two people of any combination of sexes in any two generations adjacent
to each other within any given matriline) has in one instance been defined as 'a woman (singular) after she has had a child'... Perhaps, then, the dual-plural terminology may in the case of certain contexts, denote 'unity' rather than duality or plurality: a single individual with the property of possessing certain "kin", or of being in company with certain kin.

O'Grady and Mooney (1973: 9-10).

Interestingly, a suffix possibly cognate with the Western Australian -karra is found on the other side of the continent in Dyirbal. Dixon (1972) describes the Dyirbal suffix -gara (= -karra) as meaning "one of a pair" it is most commonly used with proper nouns and indicates that the person referred to is one of two people involved in a general set of events.

Dixon (1972: 230)

The suffix can also occur on kinship terms, "indicating two of a type", and in some cases functions within a noun phrase as a co-ordinator.

Finding a suffix which has only a limited function in any of the languages within which it occurs in two quite separate areas is very unusual. Given the great similarity in function between the Dyirbal suffix and the Nyangumardji suffix, we would be tempted to reconstruct a form *-karra with a basically dual reference (Fn. 9). Presumably this sense has then spread as described for Nyangumardji, leading, in Panyjima, to the 'unifying' sense ascribed to the productive derivational suffix -karra.

In summary, Panyjima reflects the earlier dual suffix -karra in frozen kinterm duals. The language also has a suffix -karra which has spread from the earlier dual to a general 'unifying' sense. The lack of allomorphy of the productive suffix is rather strange. Panyjima has generalized the allomorph originally restricted to consonant final stems, to all environments. This does not seem consistent in a language which shows increasing movement away from consonant final stems. At present I have no explanation for this.
3.4 Pronouns

Free form pronouns in Panyjima distinguish singular, dual and plural number, and three persons. In addition, an inclusive/exclusive distinction operates in the non-singular first person paradigm.

For the most part the pronouns take the usual nominal inflections. However, the first person singular, and dual inclusive, and the second person singular have irregular paradigms. Table 7 (below) lists these exceptions to the usual case marking allomorphy.

Table 7. Paradigm for 1sg, 1dl(inc), and 2sg pronouns

<table>
<thead>
<tr>
<th></th>
<th>1sg</th>
<th>1dl(inc)</th>
<th>2sg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>ngatha</td>
<td>ngali</td>
<td>nyinta</td>
</tr>
<tr>
<td>Accusative</td>
<td>ngaju</td>
<td>ngalimpaku</td>
<td>nyinku</td>
</tr>
<tr>
<td>Instrumental</td>
<td>ngathalu</td>
<td>ngalilu</td>
<td>nyintalu</td>
</tr>
<tr>
<td>Locative</td>
<td>ngathala</td>
<td>ngalila</td>
<td>nyintala</td>
</tr>
<tr>
<td>Genitive</td>
<td>ngatharntu</td>
<td>ngalimpatharntu</td>
<td>nyinkutharntu</td>
</tr>
</tbody>
</table>

The forms of the pronouns and the third person pronoun will be discussed in sections 3.4.3 and 3.4.4 below. Sections 3.4.1 and 3.4.2 discuss the way in which the first and second person pronouns code certain kin relationships.

The coding of certain kin relationships in the pronoun paradigm has been reported for a number of Australian languages. In societies where a four section system operates, it is quite common for the pronoun paradigm for harmonic kin to be different from that for disharmonic kin (see Hale 1966). The distinction between harmonic and disharmonic kin is an important distinguishing criterion in the Panyjima pronoun paradigm but it is not the only criterion.

3.4.1 First Person Non-Singular Pronouns

Table 8 (below) presents the forms of the first person non-singular nominative pronouns. The forms are separated once again on the basis of the [+ disharmonic], [+ affinal] relationship between the speaker and the addressees (Fn. 10).
Table 8: First person dual and plural pronouns

<table>
<thead>
<tr>
<th></th>
<th>1st(inc)</th>
<th>1st(exc)</th>
<th>1pl(inc)</th>
<th>1pl(exc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>[-dish]</td>
<td>ngali</td>
<td>ngaliya</td>
<td>ngalikuru</td>
<td>ngaliyakuru</td>
</tr>
<tr>
<td>[-aff]</td>
<td>ngajuparta</td>
<td>ngaliya</td>
<td>ngajupantharri</td>
<td>ngajupantharri</td>
</tr>
<tr>
<td>[+dish]</td>
<td>ngajuparta</td>
<td>ngajuparta</td>
<td>ngajupantharri</td>
<td>ngajupantharri</td>
</tr>
</tbody>
</table>

There are three things to notice with respect to this table. Firstly, the major split is on the basis of the harmonic/disharmonic relationship between the speaker and the addressee and the [+affinal] feature is only relevant to the [+disharmonic] part of the paradigm. Secondly, the inclusive/exclusive distinction is collapsed where the relationship is disharmonic, and thirdly, the 1st(exclusive) forms do not fit the first two generalizations. Before attempting to explain this apparent discrepancy it is necessary to look a little more closely at the difference between an inclusive and an exclusive pronoun.

The inclusive/exclusive dichotomy defines two different relationships between the speaker and the addressee. For 1st(inclusive) the speaker and addressee are considered as both involved in the action, while for 1st(exclusive) the speaker aligns himself with a, not necessarily present, third participant who acts together with the speaker excluding the addressee. Thus, looking at the possible kin relationships between the pronoun referents we see that while the inclusive pronouns can code the relationships between the speaker and the addressee, the exclusive pronouns can potentially code not only the relationships between the speaker and the addressees but also the relationships between the speaker and the included third person participants, or between these participants and the addressees. Happily the relationships between the included third person participants and the speech act participants are not coded explicitly.

We can now consider the collapsing of the inclusive/exclusive distinction in parts of the paradigm. It is important to realize that the collapse does not make one or other of the inclusive or exclusive
readings predominant. Rather it yields a situation in which the pronoun is ambiguous between an inclusive and an exclusive reading. I will discuss this firstly with respect to the plural paradigm.

How exactly is the use of the pronoun ngajupantharrri ambiguous? If the person addressed is harmonically related to the speaker there is no ambiguity. It will be clear to the addressee that he is being excluded and that the speaker is including someone who is disharmonically related with respect to the speaker. In making it known to the addressee that he is including a disharmonic kinsman, the speaker is reaffirming the ties of the kin relationships. The speaker is also telling the addressee that one of the included participants is also disharmonically related to the addressee.

If the addressee is disharmonically related to the speaker, he cannot tell, on the basis of the pronoun form alone, whether he is included in the speaker's reference or whether some other disharmonic relative is being included and he, the addressee, being excluded. It is only where the addressee is disharmonically related to the speaker that any ambiguity arises.

By using a term ambiguous between the inclusion or exclusion of the addressee, the speaker is not forced to make explicit his assumptions about the addressee's behaviour. This non-committal clearly reflects the avoidance and respect relationship holding between disharmonic kin.

Now we can go back and consider the dual pronoun ngajuparta. If the addressee is harmonically related to the speaker the use of ngajuparta will signal to the addressee that he is not included but that someone disharmonically and affinally related to the speaker is being included.

For a particular relationship between the speaker and the addressee, the pronoun ngajuparta contrasts with the exclusive form ngaliya. One can use the form ngaliya in addressing and excluding a [+]disharmonic, -affinal] relative though when including a [-disharmonic, -affinal] addressee, the avoidance form ngajuparta must be used. Notice that when the speaker is including a [+]disharmonic, -affinal] relative and excluding a [+]disharmonic, -affinal] addressee, he does not signal to the addressee that an avoidance relative is being included. The form used is ngaliya. Perhaps by including the addressee the speaker is making more of an assumption about the actions of the addressee and must therefore 'defuse' this affront to the respect relationship by using the
avoidance pronoun ngajuparta.

The pronoun ngajuparta is ambiguous in the following ways. When the addressee is [+disharmonic, -affinal] the use of the pronoun could mean either that the addressee is being included, or that some [+disharmonic, +affinal] relative is being included and the addressee excluded. When the addressee is [+disharmonic, +affinal] there is complete ambiguity with respect to the inclusion or exclusion of the addressee.

3.4.2 Second Person Non-Singular Pronouns

Table 9 (below) sets out the second person non-singular nominative pronouns with respect to the dual kin address terms described in Table 6 (above). The pronouns do not cut across the particular categorization of kin relationships coded by these address terms. Examples 87, 88 and 89 illustrate the use of some of these terms.

Table 9 : Second person dual and plural pronouns (Fn. 11)

<table>
<thead>
<tr>
<th>kin relation</th>
<th>Sp. &gt; Addrs.</th>
<th>2dl</th>
<th>2pl</th>
</tr>
</thead>
<tbody>
<tr>
<td>kurtarra</td>
<td>Pa &gt; PaPa,MiMi</td>
<td>nhupalu</td>
<td>nhupalukuru</td>
</tr>
<tr>
<td>kalhangkarra</td>
<td>Pa &gt; PaKa</td>
<td>nhupalu</td>
<td>nhupalukuru</td>
</tr>
<tr>
<td>partangara</td>
<td>Pa &gt; KaKa</td>
<td>nhupalu</td>
<td>nhupalukuru</td>
</tr>
<tr>
<td>marntiyarra</td>
<td>Pa &gt; PaMi</td>
<td>nyinkuwi</td>
<td>nhupalukuru</td>
</tr>
<tr>
<td>jartuntarra</td>
<td>Pa &gt; MiPu</td>
<td>nyinkuwi</td>
<td></td>
</tr>
<tr>
<td>kurntalkarra</td>
<td>Pa &gt; PaPu,KaMi</td>
<td>nyinkungarni</td>
<td>nhupalukuru</td>
</tr>
<tr>
<td>punhayarra</td>
<td>Pa &gt; KaPu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>yirtangkarra</td>
<td>Pa &gt; PuPu</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

87. nyinkuwi marntiyarra-Ø kuliya-1ku parlapa-yu
2dINOM boy + Fa -NOM hear -PRS thump-ACC
ngayi-rnu-ku kangaroo-ACC

drop -REL-ACC kangaroo-ACC

"Did you two (father and son) hear those kangaroo's footsteps."

88. punhayarra-ŋ yana-ma yawarta-kutha-ku mana-rtā.
MoBro&MoBroSo-NOM go -IMP horse -DUAL-ACC get-FUT

"You two go and get a couple of horses."

89. nhupalu partangarra-ŋ paka-rna ngaju
2d1NOM 2DaSo -NOM come-PST 1sgACC

wiya-larta marajunu-ku.
see -FUT poor -ACC

"You two grannies came to see poor old me."

In the paradigm presented in Table 9 the divisions are not obviously a result of the harmonic/disharmonic dichotomy. Firstly, the pronoun nhupalu collapses the relationships coded by the address terms kurtarra, kalhangkarra, and partangarra. Though the terms kalhangkarra and partangarra refer to addressees who are harmonically related to the speaker and to one another, the term kurtarra can be used to refer to two addressees who are not harmonically related to the speaker. Where nhupalu is used the addressees must be harmonically related with respect to one another and must be either harmonically related to the speaker or not affinally related to the speaker.

At the other end of the scale, non-use of a pronoun marks the highest degree of avoidance. In this case the two addressees (for the dual) are both affinally related to the speaker and though the relationship between them may be relatively close, it is their relationship to the speaker which determines that a pronoun not be used.

The pronoun nyinkungarni reflects exactly the categorization made by the address term kunntalkarra. In this case the addressees are disharmonically and affinally related to one another. Although this
maximal social distance exists between the addressees, the relationship between the speaker and one of the addressees can be quite close. Thus a pronoun form is used but one which reflects the avoidance relationship prevailing between the addressees.

The pronoun nyinkuwi is not as straightforward. Use of this pronoun cannot really be said to code a particular categorization of kin relationships. Rather, it appears to involve a "trade-off" between speaker/addressee avoidance on the one hand, and addressee/addressee avoidance on the other. Firstly, notice that in the case of the marntiyarra relation the addressees are both members of the speaker's patrimoiety, yet they are disharmonically related with respect to one another. The speaker is obliged to recognize this respect relationship and thus a special form of the pronoun is used. In the case of the jartuntarra relation, the relationship between the addressees is as close as that between addressees in the kalhangkarra relation, but in the former case both addressees are disharmonically related to the speaker. It is clear that a componential analysis of these pronouns could not arrive at a satisfactory result. The nyinkuwi pronoun is used in those cases in which neither the speaker/addressee relationship nor the addressee/addressee relationship is sufficiently marked as to dominate the other.

Though the plural paradigm appears to be simpler than the dual paradigm, it does not follow the same pattern as the dual paradigm. The important differences are as follows. Firstly, the marntiyarra relation is separated from the jartuntarra relation and collapses with the non-avoidance relations. Secondly, the jartuntarra relation requires that a pronoun not be used, and thirdly, the kurntalkarra relation ceases to be a specially marked avoidance relationship. In essence, the advent of plurality has weakened the "avoidance valency" of the marntiyarra and kurntalkarra relations, yet has increased the avoidance valency of jartuntarra. How might this be explained? The following hypothesis is offered as an extremely tentative explanation.

Notice that there is an important difference between the reference set of a plural pronoun and that of a dual pronoun. The dual pronoun has a reference set of just two individuals and there will be just one kin relationship between those two individuals. That relationship will be obvious to both the speaker and the two addressees. The size of the reference set of the plural pronoun is virtually unlimited and thus,
while the speaker will know his relationship to each of the addressees, he is unlikely to be able to control the potential relationships among the addressees. It follows that the addressee/addressee relationship will be less important in determining avoidance marking in the plural paradigm than in the dual paradigm.

As noted above, the marntiyarra relation is separated from the non-avoidance relations in the dual paradigm on the basis of the respect relationship between the addressees. When emphasis on this relationship diminishes, the patrimonial relationships between the speaker and the addressees pull the relation into the non-avoidance set.

Similarly, the pronoun nyinkungarni codes the avoidance relationship between the addressees in the kurntalkarra relation. When emphasis on this relationship is reduced, this term also falls into the non-avoidance set.

The jartuntarra relation is again on the borderline. Presumably the avoidance relationship between the speaker and the addressees is greater than that between the speaker and the addressees in the kurntalkarra relationship. Though the difference is not great, the jartuntarra relation requires that a pronoun not be used.

3.4.3 Analysis of Pronominal Forms:

Table 10 (below) presents the nominative forms of the Panyjima pronouns.
Table 10: Pronoun Paradigm (Nominative)

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Dual</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>general</td>
<td>avoidance</td>
<td>general</td>
</tr>
<tr>
<td>1st(inc)</td>
<td>ngali</td>
<td>ngajuparta</td>
<td>ngalikuru</td>
</tr>
<tr>
<td>1st(exc)</td>
<td>ngaliya</td>
<td></td>
<td>ngaliyakuru</td>
</tr>
<tr>
<td>2nd</td>
<td>nyinta</td>
<td>nhupalu</td>
<td>nyinkuwi</td>
</tr>
<tr>
<td></td>
<td>nyintayi</td>
<td></td>
<td>nyinkungarni</td>
</tr>
<tr>
<td>3rd</td>
<td>thana</td>
<td>thanakutha</td>
<td>thananmarre</td>
</tr>
</tbody>
</table>

Analysis of the first and second person forms reveals the following:

The first person non-singular general forms are built on the form ngali.

The first person exclusive forms show a suffix -ya added to the basic inclusive form. The same suffix is found in a large number of languages of this area of Western Australia, for example, Dhalanyji (see Austin 1980c), Ngarluma (see Simpson 1960), Nyamal, Ngarla, and Palyku (see O'Grady, Voegelin and Voegelin 1966).

The first and second person general plural forms show a plural suffix -kuru. The same suffix is found in other Ngayardic languages, for example Ngarluma.

The avoidance forms are built on the accusative forms of the singular pronouns. Thus ngajuparta and ngajupanharri are built on the first person singular accusative ngaju, and nyinkuwi and nyinkungarni are built on the second person singular accusative nyinku. At present I have no explanation for why these nominative pronoun stems should be built on the accusative singular roots.
The form ngajupantharri clearly involves the plural suffix -ntharri discussed in section 3.2.2 above. The origin of the -parta augment in the form ngajuparta is still obscure.

The form nyinkuwi involves a suffix -wi which is probably the same suffix as that occurring in the alternative form of the second person singular (used only when calling one's spouse) nyintayi. Presumably, the glide /y/ has assimilated to the preceding round vowel /u/. Wordick (pers. comm.) suggests that this suffix might be cognate with the Yinyjiparnti Vocative suffix -yi.

The form nyinkungarni clearly involves the Having affix -ngarni-. It may be possible to relate this to the kin relationship coded by this pronoun. Recall that nyinkungarni is used where the addressees are affinally and disharmonically related to one another. The speaker is required to recognize this potential avoidance relationship and will probably be required to avoid one or other of the addressees himself. The term nyinkungarni, "having you(sg)" may be addressed to the least avoided of the pair.

We can also consider the nonsubject forms of the pronouns given in Table 7 above.

The first person dual inclusive accusative form ngalimpaku involves a suffix -mpa- between the root ngali and the accusative case marker -ku. It is possible that the -mpa- is an earlier marker of accusative (or dative) case. It is clear that -mpa/-ntu is the marker of dative pronouns in Djiwarl (Austin 1980c). Notice that the genitive form of the first person dual inclusive (ngalimpatharntu) is also built on the stem ngalima-.

The second person singular genitive pronoun (nyinkutharntu) involves the productive genitive suffix -tharntu added to the accusative form of the pronoun. Simpson (1980) notes that the Ngarluma pronoun genitives are all built on the accusative forms of the pronouns. This does not appear to be the case in Panyjima. It seems that the first person singular genitive ngatharntu is an exception. It is not possible to decide this on the basis of the form ngatharntu alone since the apparent loss of the syllable /tha/ could have arisen from a number of forms.

* ngatha-tharntu > ngatha-rntu
* ngatha-tharntu > nga-tharntu
* ngaju-tharntu > nga-tharntu
However, there is an example in the corpus of a form ngajutharntu which suggests that ngatharntu is in fact based on ngatha. There is only one example in the corpus of the form ngajutharntu and it is not clear to me at present how its use differs from that of the ngatharntu genitive.

3.4.4 Third Person Pronoun

The third person pronoun is very restricted in its usage, usually occurring only where the referent has been previously identified in the discourse. The one exception is where the referents of the pronoun are related as father's father to son's child (mayilarra, mayilarrangara). In this case the pronoun can be used even though the referents may not have been previously introduced (see example 92 below).

Unlike the demonstratives (see section 3.5) the third person pronouns refer (with the one exception noted below) only to humans. The examples below illustrate the use of the third person pronouns.

90. ngunha-Ø wangka-nha juju-Ø warlparra-ku that-NOM say-PST old man-PHC-NOM spearthrower-ACC

purlpi-yayi-ku. yana-rta thana-Ø pukanypa-Ø mana-rta want-INCH-PRS go-FUT 3sg-NOM hunting-NOM get-FUT

miyinma -larta=pula minarli-ku mantu-yu. provide for-FUT=REFL own-ACC meat-ACC

"That old man said he wants a spearthrower. He's going hunting to get his own meat, to provide for himself."

91. nyingkarenha-Ø=mpa karlpa-lha paka-lalha

"-NOM=EMP go up-PERF come-PERF

warilalanha-nguru walyi-ma-rna nyiya-kut.ma-ku. ABL bad-CAUS-PST this-DUAL-ACC

minkala-kutha-ku thanakutha-Ø wangka-nyayi-nha god-DUAL-ACC 3dl-NOM say-RECIPI-PST
"ngananha-ma-larta nyiya-yu ..."
what -CAUS-FUT this-ACC

"Nyingkaranha, having come up from Warilalanha, made things difficult for these two gods. They said to one another, "What's to be done with this fella..."

92. thanakutha-Ø minyjirru-Ø yana-rtza, nyiya-Ø mayali-Ø
3dl -NOM turn -NOM go - FUT this-NOM FaFa-NOM
yana-rtza thana-ngarni-Ø murnaji-Ø minyjirru-Ø
go -FUT 3sg -HAVE-NOM their-NOM turn -NOM
mantu-wali.
meat -ALL

"It's these two's turn to go! This grandfather can go with his grandson, it's their turn to go for meat."

93. nyiya-jirri-Ø marlpa-ngarli-Ø palya-minyjarnu-Ø
this-PLURAL-NOM man -PLURAL-NOM woman-AND ALL-NOM
karnku-nnguli-ku nhangu mana-jargaanu
keep -PASS -PRS here get -PASSPART
walypala-ngarli-lu. walypala-Ø kati-rrta thananmarra-ku
whiteman-PLURAL-INST whiteman-NOM take-FUT 3pl -ACC
purlpi-yayi-ku karnku-larta maya-ngka mirnu-ma-lku
want -INCH-PRS keep -FUT house-LOC know-CAUS-PRS
ngananha-ngarli-ku. mirnu-ma-lalha=layi ngananha-ku,
something-PLURAL-ACC know-CAUSE-PERF=TAS something-ACC
pantirta thananyungu-Ø mirnu-Ø=rru warrkamu-ku
stay -FUT 3pl -NOM know-NOM=NOW work-ACC
walypala-tharntu-ku.
whiteman-GEN -ACC

"These men, women and all, are being kept here having been got by the whitefellas. This whitefella will take them, wants to keep them in a house and teach them everything. And now that he's taught them something, they'll stay now that they know the whitefella's work."

94. nganapukulpa-ŋ naka-yi -ku-rla, nyinta paka-larta
anyone -NOM wild-1NCH-PRS=FORE 2sgNOM come-FUT
ngaliyakuru-ku wiya-larta. ngatha mirnu-ma-larta
1pl(exo) -ACC see -FUT 1sgHM know-CAUS-FUT
thananyungu-ku panu-yu=nta pajarrangu-ku!
3pl -ACC really-ACC=INT wild ones-ACC

"If anyone gets wild, you come and see us. I'll show that angry mob down there, see if I don't!"

Examples 93 and 94 show instances of the two third person plural pronouns thananmarrara and thananyungu. The pronoun thananyungu is used when the group referred to is seen as being in a fixed place distinct from the place of utterance. It is often used in referring to a group living in another place. The more general plural pronoun is thananmarrara. The thananyungu form clearly involves the Associative derivational suffix while thananmarrara involves the derivational suffix -nmarra (see section 3.2.2 above). We may want to assign some plural sense to -nmarra as it is clearly involved in the derivation of the third person plural pronoun form. Note, however, that the third person singular pronoun, thana, is identical with the widely occurring third person plural pronoun DhaNa (as characterized by Dixon 1980). Panyjima has presumably reanalyzed this form as the singular and has developed a dual form using the productive dual suffix -kutha-. In that the suffix -nyungu- has no inherent plural sense and that it is, at least at present, difficult to give the suffix -nmarra- a clear plural reading, thana appears to retain some ghost of its original plurality (Fn. 12).
As noted above, there is one exception to the rule that the third person plural forms can only have human referents. In examples such as 95 and 96 below, where the pronoun thana is being used very much like the English relative pronoun 'which' (in the sense of a choice among items), the referents need not be human and are often inanimate.

95. ngaiikuru thurla-yi-rtu warrungkamu, ngula-rru
1pl(inc)NOM eye -INCH-FUT tomorrow there=NCW
yana-rtu wiya-mmayi-rtu juru=la nuwala-la
go -FUT see -RECIP-FUT all-NOM Noualla Centre-LOC
wangka-nyayi-rtu thana-yu mirlimirli-la-mlarta,
talk -RECIP-FUT 3sg -ACC paper -LOC-CAUS-FUT
"We'll wake up in the morning and go down there to see one another down there now at the Noualla Centre, to tell each other which man to vote for (to put on the paper)."

96. "thana-yu purlpi=yayi-rla warrkunti-ku?"
3sg -ACC want-INCH-ACC=FORZ boomerang-ACC
"Which boomerang do you want?"

"panha-yu kurarra-ku warrkunti-ku."
that-ACC kurarra bush-ACC boomerang-ACC
"That kurarra wood one."
3.5 Demonstratives

Table 11 (below) lists the Panyjima demonstratives. The demonstratives obligatorily mark the distance of the referent with respect to the speaker and the addressee. The table makes a distinction between 'pronominal' demonstratives and 'adverbial' demonstratives. The former inflect for number and case in agreement with their head noun (whether present or not), and serve to identify the referent by definitely determining its location and distance with respect to the speech act participants. The adverbial demonstratives are bound to the particular situation and designate a place. Though they are semantically closest to adverbs, the adverbial demonstratives can "stand in" for nouns and, it appears, may even take number inflection (see example 97 below).

97. ngatha=rla walyi-yayi-ku=rru thitharrika-lku nhangu-jirri.
1sgNOM=FORE bad -INCH-PRS=NOW hang around-PRS here -PLURAL
"I'm getting tired of hanging around all around here!"

The non-visible demonstratives operate both pronominally and adverbially. They are used to mark a place or referent as not visible to the speaker (though it may be audible or remembered or may be visible to the addressee). The other demonstratives need not have visible referents.
Table 11: Demonstrative Paradigm

<table>
<thead>
<tr>
<th></th>
<th>near speaker</th>
<th>near addressee</th>
<th>far</th>
</tr>
</thead>
<tbody>
<tr>
<td>pronominal</td>
<td>nyiya</td>
<td>panha</td>
<td>ngunha</td>
</tr>
<tr>
<td>adverbial position</td>
<td>nhangu</td>
<td>pala</td>
<td>ngula</td>
</tr>
<tr>
<td>adverbial allative</td>
<td>nharniwali</td>
<td>palarni</td>
<td>?</td>
</tr>
<tr>
<td>adverbial ablative</td>
<td>nhangu-nguru</td>
<td>pala-nguru</td>
<td>ngula-nguru</td>
</tr>
<tr>
<td>not-visible</td>
<td>nyinyji</td>
<td>?</td>
<td>ngunyji</td>
</tr>
</tbody>
</table>

It is not clear at this stage whether the system underlying the three degrees of distance is as characterized in Table 11, 'near-the-speaker / near-the-addressee / near-neither-the-speaker-nor-the-addressee', or is 'near/mid-distant/far' with respect to the speaker. There are many examples in the corpus for which neither characterization appears to be totally adequate (though most examples are, unfortunately, irretrievably divorced from context). It seems that the analysis in which distance is reckoned with respect to both the speaker and the addressee explains more cases. For example, consider 98 below:

98. nyiya-Ø karrpu-Ø=rla warni-ku="ru!
this-NOM sun -NOM=FORE fall-PRS=NOW

"This sun is going down now!"

An analysis in which distance is reckoned only from the speaker's point of view would be hard pressed to explain the use of nyiya in this example. However, if the speaker is closer to the setting sun than the addressee, that is, is west of the addressee, there is little problem with the alternative analysis. I will assume the analysis of speaker and addressee determined relative distance though I do not think it can be incontrovertably established on present evidence.
The allative adverbial forms are used when the referent is in motion and coming towards the speaker. This is redundantly the case for nharniwali but the few examples do not make clear whether palarni indicates motion towards the addressee or towards the speaker (see examples 99 and 100 below).

There appear to be two near-addressee position adverbial forms but there are not enough context clear examples in the corpus to determine exactly how the two differ (see examples 101, 102 and 103 below).

99. kuliya-nmal ngananha-∅ palarni paka-1ku warruwarru-la. listen-IMP something-NOM thereALL come-PRS dark -LOC

"Listen! There's something there coming in the dark."

100. palarni =mpa kangkuru-∅ jiinyjiiny -ma-1ku. thereALL+EMP kangaroo-NOM clicking noise-CAUS-PRS

"There's a roo making a clicking noise down there."

101. wenka-∅ parilha, mirta kampa -nha, wantha-nma raw-NOM still not be cooking-PST put -IMP pala kampa -rta mantu-∅. there be cooking-FUT meat-NOM

"It's still raw, hasn't ...ooked, leave the meat there to cook."

102. mirta=r1a, ngarri-rta palangu kamungu-∅. not +FORE lic -FUT there hungry-NOM

"No! That hungry fella can lie there."

103. ngatha purlara-la mara-∅ puntha -rta, 1sgNOM first -LOC hand-NOM be washing-FUT ngatha paka-larta palangu. 1sgNOM come-FUT there
"I'll wash my hand first, then I'll come over there."

There are two gaps in the paradigm as presented in Table 11. Firstly, there is no adverbial allative form for the ngula demonstrative. This may be simply an accident of the corpus but must be investigated further. Secondly, there is no 'near addressee' not-visible demonstrative. Again, this may be an accident of the corpus and deserves further investigation.

We can now go on to consider the forms of the demonstratives. The paradigm suggests the demonstrative roots nha- 'near speaker', pala- 'near addressee', and ngu- 'far'. The pronominal demonstratives involve a suffix -nha (the root pala- appears as pa-) which probably descends from the old accusative marker -NHa (see Dixon 1980:360 for a discussion of this with respect to the Dhalanyji demonstrative ngunha).

The positional form of the 'far' demonstrative has the added suffix -la which most likely derives from the locative suffix -la. This same suffix may also be involved in the derivation of the pala- root but at a much earlier stage. The pala- demonstrative root is found in a large number of Pama-Nyungan languages including the western desert dialects, Dyirbal, and Garadyari.

The form palarni involves a suffix -rni. In some of the languages to the south and west of Panyjima, such as Djiwarli, Dhargari, and Yingkarta, a post-inflectional clitic -rni indicates motion towards the speaker. This suffix also appears in the form nharni-walli. In this case, -rni has been added directly to the root and has then been further augmented by the productive allative suffix -walli. I have no examples of nharni- occurring independently of the allative suffix and there are no examples of palarni occurring WITH the allative suffix. It appears that the -walli suffix has become part of the demonstrative.

The 'near addressee' and 'near speaker' positional forms, palangu and nhangu respectively, both have a suffix -ngu added to the root. At present I have no idea as to the origin of the -ngu suffix. Future work may reveal a contrast between palangu and pala which throws some light on this.

The not-visible forms ngunyji and nyinyji clearly involve a suffix -nyi- added to the demonstrative roots ngu- and nyl- respectively.
3.5.1 Anaphoric Demonstrative Forms

A number of the demonstratives listed in Table 11 (above) have been found in a number of apparently frozen forms which have an anaphoric function. That is, they code that the identified referent is identical with a referent previously identified in the discourse. Some examples are given below.

104. ngaliyakuru ngarri-ku wuntu-ka. kanarakarara-la=layi. 1pl(exe)NOM lie -PRS river-LOC first light-LOC=TAS

yukurru-ngarli-Ø parruntu-lku yurlu-warntura-la. dog -PLURAL=NOM bark -PRS camp -EACH -LOC

kutiya-Ø=rla karipa-nha wiya-larta. nyoja-0 panu-Ø other-NOM=FORE get up-PST see -FUT thin-NOM very-NOM

karri-ku marlpa-Ø. mani -Ø=rla wangka-nha," wiya-nma stand-PRS man -NOM others-NOM=FORE say -PST see -IMP

panhalka ngana-Ø, jayinma-larta yena-za." ngatha thatAnNOM who-NOM ask -FUT go -IMP 1sgNOM

wiya-1ku payonyji -ku, nyoialka karri-ku,
see -PRS policeman-ACC thisAnNOM stand-PRS

kana-ngka=layi, paka-larta yurlu-karta=rru.
dawn-LOC =TAS come-FUT camp -ALL =NOW

yurlu-ngka=layi, marlpa-warntura-ku jayinma-1ku camp -LOC =TAS man -EACH -ACC ask -PRS

tharni-yu nyanyji-yu=rla, jayinma.-1ku yini-yu where-ACC victim-ACC=FORE ask -PRS name-ACC

thana-ngka-ku kutharra-ku. wangka-nha ngaju
3sg -LOC-ACC two -ACC say -PST 1sgACC
"We’re all camping in the river. At first light the dogs in every camp start barking. This other fella got up to see. There’s a man standing right in close. The others said, “See who that is! Go and ask him.” I could see it was a policeman. This fella is standing and at dawn he’ll come into the camp. In the camp now, he’s asking each man the whereabouts of his victims. He’s asking after the two names he’s got with him. He told me he was looking for two fellows and gives me the names of those two. I said, “Go (down there)! You see that fire burning? The two you want are camping by that fire.”"

"That woman kneeling there is poking something in the fire." "Oh its meat there! That woman who was sitting in turning it over."
Table 12 presents the anaphoric forms found to date.

Table 12: Anaphoric Demonstratives

<table>
<thead>
<tr>
<th>NOM</th>
<th>ACC</th>
<th>LOC</th>
<th>DUAL NOM</th>
<th>ABL</th>
</tr>
</thead>
<tbody>
<tr>
<td>nyiyalka</td>
<td>nyiyalku</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>panhalka</td>
<td>panhalku</td>
<td>panhalkutha</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ngunhalka</td>
<td>ngunhalku</td>
<td>ngunhalkutha</td>
<td>ngunhala</td>
<td>ngulannguru</td>
</tr>
<tr>
<td>ngunyjalka</td>
<td>ngunyjalku</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These forms present a number of analytical problems. The nominative and locative forms taken alone might suggest that we set up a class of anaphoric case inflections. However, the dual forms clearly show that the anaphoric element is, at least historically, a derivational affix to
the demonstrative root. This generates another set of problems. If the 
-1- suffix is treated as a productive derivational suffix, it in effect 
violates the morpho-phonotactic constraints of the language.

In section 2.2 above it was noted that some consonant clusters which 
are permitted between a stem and stem deriving suffixes are not 
permitted between a stem and inflectional suffixes. Thus the closing 
suffix -pa is often employed to break up a cluster between a stem and 
its inflection even though that cluster may be permitted between a stem 
and a derivational suffix.

The clusters occurring between the putative anaphoric derivational 
suffix and the accusative, locative and ablative inflections are 
generally not permitted between stem and inflection. However, these 
clusters, and the morphophonemic adjustment of /l/ to /n/ preceding the 
ableative suffix, are fully consistent with the clusters permissible 
between stem and derivational suffix. If we maintain the analysis of -1- 
as a synchronic derivational process, we will need to modify the, at 
present rather neat, analysis of the morpho-phonotactic constraints of 
the language, and introduce a set of morphophonemic rules which are 
restricted to just this set of exceptions. The preferred choice is to 
treat the demonstratives in Table 12 as fossilized forms (Fn. 15). The 
internal reconstruction of these forms then proceeds as follows:

At an earlier stage of the language, the suffix -1- was a 
(semi-)productive derivational affix. Also, at this stage, the 
morpho-phonotactic constraints of the language were slightly different; 
the clusters now permitted between stem and derivational suffixes were 
also permitted between stem and inflectional suffixes. Consequently, the 
allomorphs of particular inflections were more varied. With respect to 
the forms in Table 12, the form of the accusative following a consonant 
was -ku, and the form of the locative following an apico-alveolar 
consonant was -ta (note that /lt/ is not a possible cluster and thus 
"ngunha-1-ta reduces to ngunhata"). Presumably the anaphoric 
demonstratives were not reanalyzed with the change in the 
morpho-phonotactic constraints of the language.

Two further points can be made with respect to the forms in Table 
12. Firstly, we need to explain the forms of the nominative anaphoric 
demonstratives. If the nominative was unmarked in the previous stage of 
the language we would expect the suffix -pa to occur preventing a word 
final cons. It is possible that this suffix was analogically
altered to -ka on the basis of the accusative forms (with final -iku). Secondly, we need to account for the root alternation ngunyji/ngunyja for the not-visible far demonstrative. At present I have no non-ad hoc explanation for this.

Rather than being the fossils of a period of Panyjima history, the anaphoric demonstratives may have been borrowed as unanalyzed wholes from a language with the more liberal phonotactic constraints. While this possibility should be kept in mind, anaphoric demonstratives of the type described here have not, to my knowledge, been described for any other Australian language.

3.5.2 Predicate Demonstrative

I have found only one predicate demonstrative, junta "like this". Like the nominal demonstratives described above, junta has an anaphoric form (see example 108 below).

107. papa-yu=layi thaathu-larto 'pulawa-la, thurnta-rnuma-lku
water-ACC=TAS pour -FUT flour-LOC roll -CONSEQ-PRES
junta-yu ngarri-reta-ku warama-rnaanu-ku.
like-ACC lie -FUT-ACC make-PASSPART-ACC
"Now you pour water into the flour, and then roll it to lie just like this one that's already been made."

108. nyinta panha-jirri-ku kukunyjarri-ku mirta mirtanyarni
2sgNOM that-PLURAL-ACC sheep -ACC not fast
kati-reta, nyarni kati-reta panha-jirri-ø
take-FUT slow take-FUT that-PLURAL-NOM
kukunyjarri-ngarli-ø kuwarri-la. nyinta kati-reta
sheep -PLURAL-NOM now -LOC 2sgNOM take-FUT
nyarni panu kukunyjarri-ku yilamu-ngarni-ku.
slow very sheep -ACC lamb -HAVE -ACC
Don't you take those sheep fast, take them slow.
Now those sheep, you take them very slow, the sheep with lambs. That's the way to drive those sheep.

3.5.3 Directionals

The morphological coding of allative and ablative on directionals does not involve the productive inflectional suffixes employed on general nominals. Table 13 below presents the forms of the directionals found so far.

Table 13: Directional Paradigm

<table>
<thead>
<tr>
<th>ablative towards speaker</th>
<th>location</th>
<th>facing</th>
</tr>
</thead>
<tbody>
<tr>
<td>up river</td>
<td>jingkarni</td>
<td>jingkalpa</td>
</tr>
<tr>
<td>down river</td>
<td>yapulpa</td>
<td>yapulpurlu</td>
</tr>
<tr>
<td>close to speaker</td>
<td>murnalpa</td>
<td>murnalpurlu</td>
</tr>
<tr>
<td>on top (above)</td>
<td>kankala</td>
<td>kankalpurlu</td>
</tr>
<tr>
<td>on top (below)</td>
<td>kankarni</td>
<td></td>
</tr>
</tbody>
</table>

The 'facing' form involves a suffix -purlu added to the root. This morpheme is identical to the Yinyjiparni nominal 'face' which itself may be suffixed to certain directionals. The 'facing' form is used when a person or thing is facing in the particular direction or is moving toward that position. Thus it is used as the common allative for directionals.

The jingkarni form involves the -rni suffix discussed in section 3.5 and indicates that the person or thing is coming from the up river direction towards the speaker.

The 'on top' form kankala has the locative suffix added to the root kanka-. The form is used when the modified head is situated on top of, or in the top of some location above the speaker's eye level. The kankarni form is used when the head nominal is on top of some object.
below the speaker's eye level. It is also used when an object or person is falling onto some object. Notice that this form also has the -rni suffix.

Table 14 lists the forms of the compass points.

Table 14: Compass Points

<table>
<thead>
<tr>
<th>position</th>
<th>ablative</th>
<th>allative</th>
<th>ablative towards speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>north</td>
<td>wartalpa</td>
<td>wartalpanguru</td>
<td>wartankura</td>
</tr>
<tr>
<td>south</td>
<td>kurila</td>
<td>kurilanguru</td>
<td>kurilarra</td>
</tr>
<tr>
<td>east</td>
<td>kakarra</td>
<td>kakarranguru</td>
<td>kakarrara</td>
</tr>
<tr>
<td>west</td>
<td>wuluju</td>
<td>wulujanguru</td>
<td>wulujurrutharntu</td>
</tr>
</tbody>
</table>

3.6 Interrogatives/Indefinites

3.6.4 Pronominal Interrogatives/Indefinites

As in many Australian languages there are a set of pronominal forms used as indefinites and as interrogatives. The paradigms for the non-specific indefinite/interrogative pronouns ngana, 'who/someone', and ngananha, 'what/something', and for the specific (non-human) indefinite/interrogative pronoun ngapinha, 'what thing/thing', are given below.

<table>
<thead>
<tr>
<th>who/someone</th>
<th>what/something</th>
<th>what thing/thing</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOM ngana</td>
<td>ngananha</td>
<td>ngapinha</td>
</tr>
<tr>
<td>ACC nganangu</td>
<td>ngananhaku</td>
<td>ngapinhaku</td>
</tr>
<tr>
<td>INST nganalu</td>
<td>ngananhalu</td>
<td>ngapinholu</td>
</tr>
<tr>
<td>LOC nganalhala</td>
<td>ngananhatharntu</td>
<td>ngapinhatharntu</td>
</tr>
</tbody>
</table>

Notice that the root form of 'what/something' is ngananha, which involves the suffix -nha added to the root of ngana 'who/someone'. It is possible that this is, historically, the -nha- derivational suffix
and is again related to the Western Desert -nya which in Ngaanyatjara (Glass 1980) occurs on the interrogative ngan-. However, it is difficult to see how the use of the definitizing -nya on ngana- could have become fixed as the non-human indefinite/interrogative. In Panyjima. An alternative analysis might treat -nha as an old accusative case marker. Assume that an earlier stage of the language had only the one non-specific indefinite/interrogative, *ngana, covering both human and non-human referents. The accusative form of the indefinite/interrogative would have been *ngananha. The change from a split ergative case marking system to a completely nominative/accusative system would have left both *ngana and *ngananha as nominative forms. If we accept that in pre-Panyjima, non-human indefinites (being inherently less topical) were most often found in accusative marked position, then the reanalysis of *ngana and *ngananha as human and non-human respectively, seems quite plausible. The analysis is very speculative and needs to be examined in the light of the many changes accompanying the split ergative to accusative change. A reconstructed history of proto-Ngayarda syntax and morphology would - be largely on such facts as the ngana/ngananha relationship.

The indefinite/interrogative has what might be analyzed as a plural form nganapukulpa. Some examples are given below.

109. nganapukulpa-ŋ nhupalukuru nyarru-wayi-ku=ra?
    who(PLURAL)-NOM 2plNOM dance-INCH-PRES=FORE

"Who are you all dancing?"

110. nganapukulpa-ŋ mirta=mu yukurru-ku nyiya-ku paka-rnu-lw.
    who(PLURAL)-ACC 3sgNOM know-CAUS-PST dog -ACC come-REL-ACC

"I'll show the dog this fella sitting with him, the dog won't bark at anyone who comes along then."
ngana ngunha-jirri-ŋ karri-ku yurlu-ngka-rla?
who that-PLURAL-NOM stand-PRS camp -LOC:FORE

nganapukulpa-ŋ wiya-naz-rla. ngunha-jirri-ŋ
who(PLURAL)-NOM see -IMP:FORE that-PLURAL-NOM

nharniwalir-u :kak-lkuk jina-ngka. mani -২-rla
hereALL =NOW come-PRS track-LOC others-NOM:FORE

yana-ma ngampapi-larta nganangu, ngunha-jirri-ŋ =mpa
go -IMP meet -FUT whoACC that-PLURAL-NOM:EMP

"Who's that mob standing in the camp? See who they
all are! That mob's coming on our tracks now. You
others go and meet whoever it is. Yes, that mob!"

It is clear from examples such as 111 that the form ngana can have a
plural reference. What then is the function of the form nganapukulpa?
It appears that the form is used when reference is made more explicitly
to the individuals in the group. In 109 and 110 it seems the speaker is
asking for individual identification of the members of the group. There
is not enough data at present to be able to arrive at a clear
understanding of nganapukulpa.

There is one example in the corpus of the form nganahna taking
plural inflection. The example is:

nyinta yana-ma purlara wiya-lku nganahna -ngari-ku
2sgNOM go -IMP ahead see -PRS something-PLURAL-ACC

ngari-jangu-nta warri-ngka-ku.
lie -REL -INT ground-LOC-ACC

"You go ahead and see if there is anything on the ground."

Examples 113 and 114 illustrate the difference between the non-human
non-specific indefinite nganahna, and the non-human specific indefinite
ngapinha.
113. "ngatha ngananhalu nhantha-nguli-nha."
   1sgNOM somethingINST bite -PASS -PST
   "I was bitten by something."

   "nhantha-nguli-nha nyinta ngapinhulu=nta,
   bite -PASS -PST 2sgNOM thingINST =INT
   manyji -ku =nta parnka-ku =nta?
   death adder-INST=INT lizard-INST=INT

   "What was the thing you got bitten by, a death adder
   or a lizard?"

114. ngananha parnti -ku ngula. ngapinha?
   somethingNOM be smelling-PRS there what thingNOM
   "Something smells down there. What is it?"

The non-human indefinite/interrogatives often take verb deriving
morphology. Some examples are given below.

115. ngatha yana-rtta wiya-larta palya-yu ngatunru-ku
   1sgNOM 30 -FUT see -FUT woman-ACC 1sgGEN -ACC
   ngananha -yi -lha -ku
   something-INCH-PERF-ACC
   "I'll go and see what happened to my woman."

116. ngananha -ma-rna nyinta ngunhalku!?
   what -CAUS-PST 2sgNOM thatAnACC
   "What have you done to him!?"

117. mirta nyinta yana-rtta punta-rtta=rla, ngapinha-yi-jara
   not 2sgINCH go -FUT swim -FUTURE thing-INCH-MIGHT
mangkarrpa-yi-jara ngarlu-ŋ.
hard -INCH-MIGHT guts-NOM

"Don't you go swimming, that thing might happen, your guts might cramp up."

118. mirta thaa-larta jipi-ngarli-ku kukunyjarri-ku
not let -fut nak~j-PLURAL-PRS sheep -ACC
ngapinha-ma-ljara kuluma-ljara kurlkura-ngarli-la
thing -CAUS-MIGHT mix up-MIGHT wool -HAVE -LOC
kukunyjarri-ku.
sheep -ACC

"Don't let those shorn sheep go, something might happen, they might get mixed up with the wooly ones."

Verb forms based on ngapinha are often used in the avoidance language to avoid making explicit the particular action denoted by the verb. Example 119 is one such case.

119. ngatha ngapinyja-nguli-nha wanyjatara-lu.
1sgNOM be thing -PASS -PST dog -INST

"I was bitten by a dog."

There is one example of what may be a verb derived from the human indefinite/interrogative ngana. The verb is ngananypi-ŋ "to continue to not recognize who it is" on-ŋ appears to involve the 'processive' suffix -ŋ- (see section 3.7.4.3) added to the root ngana augmented by a consonant /ŋ/.

120. ngatha nyinku mirnu =rru, warrpa-yu=mu=r1a
1sgNOM 2sgACC know =NOW far -ACC=THEN=FORE
ngananypi -rna.
not recognize-PST
"I know you now, I kept on not being able to recognize who you were when you were a long way off."

3.6.2 Locative and Temporal Indefinite/Interrogatives

Some examples of the locative indefinite/interrogative, tharni, which inflects like a nominal, are given below.

121. tharni-wali nhaulakuru yana-ku?
where -ALL 2plNOM go -PRS

"Where are you all going?"

122. ngatha mirtamirnu-D tharni-yu yukurru-ku yana-lha-ku.
1sgNOM not know-NOM where-ACC dog -ACC go-PERF-ACC

"I don't know where that dog's gone."

In some examples, the locative tharni occurs with the added suffix -nha. It appears that in these cases the speaker assumes a specific location though that location is indefinite. This ties in with the analysis of -nha as related to the Western Desert suffix -nya.

123. tharninha-wali yapalpurlu=nta?
where(spec)-All down river=INT

"Where are you going, down river?"

124. wiya-larta ngajupanthari tharninha-wali-ku yana-jangu
see -FUT 1pl(avoid)NOM where(spec)-All-ACC go-REL
munna -ngka-ngarni-ku kati-jangu.
between arm and body-LOC -HAVE -ACC carry-RELACC

"We'll watch where he's off to carrying it under his arm."

Interrogative verbs can be formed on either tharni or tharninha.
125. maripa-∅ palangu karri-lha tharni-yayi-nha=rru?
mar. -NOM there stand-PERF where-INCH-PST=NOW

"Now what's become of the man who was standing there near you?"

126. tharninha -yi -nha ngatharntu-∅ yawarta-∅, nhupaluk-ru where(spec)-INCH-PST 1sgGEN -NOM horse-NOM 2plNOM

wiya-rna ngatharntu-ku yawarta-ku tharninha -yi -nha see -PST 1sgGEN -ACC horse -ACC where(spec)-INCH-PST

ngunyji kata-ngka ngunha-ngka?
there scrub-LOC that -LOC

"Where's my horse got to, have you lot seen my horse? Perhaps he's somewhere down there in that scrub?"

127. mirta wiyurrpa-∅ walyi-yayi-RTA, paka-nma ngathala not feelings-1OM bad -INCH-FUT come-IMP 1sgLOC

tharninha -ma-nguli-RTA wangka-yu kuliya-larta.
where(spec)-CAUS-PASS-FUT words-ACC hear -FUT

"Don't get upset, come along with me and hear the word about where you're going to be taken."

The temporal indefinite/interrogative is thanarta. Two examples are given below.

126. thanarta ngali wiya-mmayi-RTA ngarntamu?
when 1dpNOM see -HECIP-FUT again

"When are we going to see one another again?"

129. ngatha kumpa-ku panti-nha nyinku
1sgNOM wait-PRS sit -PST 2sgNOM
thanarta-ku  paka-larta-ku.
when -ACC     come-FUT -ACC

"I've been sitting and waiting for when you were going to come back."

It may be possible to relate the forms of the locative and temporal indefinite/interrogatives. Firstly, consider the temporal indefinite/interrogative thanarta. We could analyse this as the third person singular pronoun thana, augmented by the suffix -rta. Looking at other languages in the area, we find that Yinyjiparnti and Djiwarli (for example) have a temporal indefinite/interrogative wantharta, which resembles the locative indefinite/interrogative wartha in these languages. Wordick (1979) analyses the suffix -rta as a locative suffix of some sort but I am more inclined to look for a source in the Yanyjima 'future irrealis' tense marker -rta/-larta (see section 3.7.3 below). Certainly, the 'future irrealis' sense is compatible with an indefinite temporal. I have no explanation as yet for the Panyjima form being based on thana.

Recall, however (from section 3.4.4), that the interrogative 'which' is also based on thana. The form is thanayu. The Yinyjiparnti form for 'which' is wanthanha. Further, the Panyjima greeting thanarru (thana=rru '3sg=NOW') has the Yinyjiparnti counterpart wanthiwa. It appears there is some parallel in function between wantha- in Yinyjiparnti and thana- in Panyjima.

The form tharni is not so transparently related to thana. Although the first syllable is identical, the locative indefinite/interrogative has a suffix -rni. This is probably the same -rni as we have discussed in relation to the speaker oriented demonstratives and directionals. To complete the picture we would need to propose a proto-form *thanarni with the subsequent fortuitous dropping of the second syllable.
3.7 Verbal Morphology

3.7.1 Transitivity

Unlike most Australian languages, Panyjima cannot be said to make a clear distinction between transitive and intransitive verbs. In an ergative language the transitivity of a verb is usually decided on its ability to take an ergative marked subject NP. For example, Dixon (1980) gives the following definition for a typical Australian language with absolutive/ergative marking on nouns and nominative/accusative marking on pronouns:

If a verb can occur in a sentence with a nominal in ergative case (marking A function) and/or with a pronoun in accusative form (marking O function) then it is transitive; if it can occur with neither an ergative noun nor an accusative pronoun then it must be intransitive.

Dixon (1980:376)

In an accusative language transitive and intransitive subjects are marked identically and thus if we were to use case marking as a criterion we would have to decide on the transitivity value of a particular verb solely on the basis of its ability to take object arguments.

It is worth asking exactly what the categorization of verbs as transitive or intransitive means. Hooper and Thompson (1980) point out that transitivity is traditionally understood as a property of an entire clause, "such that an activity is 'carried over' or 'transferred' from an agent to a patient". They propose an analysis of transitivity into a number of components which then suggest a scale upon which clauses can be ranked. Many verbs, by virtue of their lexical meaning, imply particular values on each of Hooper and Thompson's components such that the clauses in which they occur can often be clearly characterized as either close to or far from "CARDINAL transitivity". Because of this the verbs themselves can often be characterized as transitive or intransitive. There will, however, be verbs which do not fall neatly at one or other end of the transitivity continuum. There are a number of...
such verbs in Panyjim, and in sections below I have used the term 'ambitransitive' to refer to these.

Of the 101 monomorphemic verb roots so far discovered in Panyjim, 32 are clearly intransitive in that they are not found to take accusative marked NP arguments. A further 53 verbs can be considered transitive in that they usually occur with an accusative NP argument. One verb, yinya-Ø "to give", may be called ditransitive as it occurs with two accusative NP arguments. The remaining 15 verbs cannot easily be classed as either transitive or intransitive. Each of these verbs may occur with an accusative NP argument the semantic role of which is defined by the particular verb. However, they may also occur without an accusative NP argument in which case they are clearly understood as intransitive verbs. It might be argued that in each instance we have two homophonous verbs but this would gain nothing for the analysis. The 15 ambitransitive verbs are listed below.

paka-1 "to come (upon)"
tharrpa-Ø "to enter (in)"
karlpa-Ø "to arise, go up (on)"
kumpa-Ø "to sit and wait (for)"
thitha-Ø "to wait (for), expect"
yurra-1 "to dig (for)"
patha-1 "to blow"
ngalari-Ø "to forget, get lost"
thurni-Ø "to laugh (at)"
purrrpa-1 "to shout (at)"
mirra-Ø "to sing out (to)"
wangka-Ø "to say, speak, talk (to)"
ngaji-Ø "to cry (for)"
ngarna-Ø "to eat, drink, have a feed"
pawnta-1 "to rain (on)"

Considering these verbs and the clauses in which they occur in terms of Hooper and Thompson's components of transitivity, we find that they all fall somewhere between cardinal transitivity and cardinal intransitivity. Although the verbs can occur with two participants, the accusative marked NP is in most cases totally unaffected. The actions are generally non-proximal and atelic.
The examples below illustrate the use of some of these verbs. The a. examples show the verb with two arguments one of which is marked with accusative case, while the b. and c. examples show the verbs without accusative marked NP's. Examples 132b and 133b show the verbs karlpa-ə and tharrpa-ə with a locative marked NP object.

130a nganenha-ʊ ngaju mirta paka-nha warrukarta-la. something-ACC 1sgACC not come-PST night -LOC

"Nothing came upon me in the night."

130b nyiya-ʊ marlpa-ʊ paka-rna ngaju wiya-larta. this-NOM man -NOM come-PST 1sgACC see -FUT

"This man came to see me."

131a ngunha-ʊ jilya-ə kantharri-ku ngaji-ku. that-NOM child-NOM MoMo -ACC cry -PRS

"That kid's crying for her grandmother."

131b nyiya-ʊ jilya-ʊ ngaji-ku. this-NOM child-NOM cry -PRS

"This kid's crying."

132a ngaliyakuру tharrpa-rta thurnu-yu moya-yu. 1pl(exc)NOM enter -FUT inside-ACC house-ACC

"We'll go in the house."

132b nyinta tharrpa-ma panha-ngka pili-ngka! 1sgNOM enter -IMP that -LOC cave-LOC

"You go into that cave!"

133a ngatha yana-rta karlpa-rta nylia-yu marnta-yu. 1sgNOM go -FUT go up -FUT this-ACC hill -ACC
"I'll go and climb this hill."

133b karlpa-nga ngunha-ngka karnti-ka wiya-larta
go up-IMP that -LOC tree -LOC see -FUT

nganangu peka-runu-kul
who ACC come-REL-ACC

"Get up in that tree and see whoever is coming."

133c niya-p marlpa-ţ karlpa-nha=rru.
this-NOM man -NOM get up-PST=NOW

"This man has got up now."

It is clear that treating the various senses of the verbs as reflecting homophonous forms will not add to the analysis. For example, the verb karlpa-ţ can mean "to get up, arise" as of someone or something lying or sitting down, and can mean "to climb, get up into" a tree or hill or some such. If these two senses are described as separate homophonous verbs, we are still left with cases like 133b in which the supposedly transitive verb does not take an accusative marked transitive object.

It is not clear exactly how the clauses with locative marked objects differ from those with accusative marked objects. There is apparently some sense in which the action is more directed towards an endpoint when the object is marked locative. That is, there is an inference that as a result of the verb event, the subject of the verb actually ends up in the location specified by the locative object. There is not necessarily such an inference when the object is marked with accusative case (though it is in 132a above) There also appears to be some tendency for the locative marked object to occur more often with imperatives and realis future forms of the verb. This may be related to the more directed sense of the locative but more data is needed before this can be clarified.

The categorization of the verbs as ambitransitive says very little about the properties they share in common. Rather it is a negative definition. Ambitransitive verbs are those which do not fit neatly into the transitive and intransitive categories. In particular, notice that the verb tharrpa-ţ appears to require an object but that object can be
marked with either accusative or locative case. On the other hand, the verb ngaji-∅ rarely occurs with an object and that object is always accusative.

It should be pointed out that although some verbs are categorized as transitive, this does not prevent their occurring in clauses which, by Hooper and Thompson's analysis, are weakly transitive. For example, all Panyjima verbs may be inflected for habitual aspect and verbs which otherwise appear to always occur with an accusative NP can occur with simply one (subject) argument when so inflected. Example 134 shows the verb thala-∅ "to kick" without an accusative NP while 135 shows the same verb with an accusative NP. While 135 is quite clearly transitive, 134, despite the categorial transitivity of the verb, is quite intransitive.

134. ngunha-∅ yawarta-∅ thala-lwuru.
     that-NOM horse-NOM kick -HABIT
     "That horse used to kick." 

135. ngunha-∅ yawarta-∅ ngaju thala-lwuru.
     that-NOM horse-NOM 1sgACC kick-HABIT
     "That horse used to kick me."

3.7.2 Conjugation

Verbs in Panyjima fall into one of two conjugations. Table 15 gives the conjugation membership of the 101 monomorphic verbs with respect to transitivity. Table 16 gives conjugation membership with respect to the root final vowel.
Table 15: Conjugation Membership and Transitivity

<table>
<thead>
<tr>
<th>Membership</th>
<th>-L</th>
<th>-Ø</th>
</tr>
</thead>
<tbody>
<tr>
<td>ditransitive</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>transitive</td>
<td>47</td>
<td>6</td>
</tr>
<tr>
<td>ambi transitive</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>intransitive</td>
<td>4</td>
<td>28</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>56</td>
<td>45</td>
</tr>
</tbody>
</table>

Table 16: Conjugation Membership and Root-Final Vowel

<table>
<thead>
<tr>
<th>-Ø</th>
<th>-L</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>-i#</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>-a#</td>
<td>40</td>
<td>28</td>
</tr>
<tr>
<td>-u#</td>
<td>5</td>
<td>-</td>
</tr>
</tbody>
</table>

A small number of verb roots appear in both the -L conjugation and the -Ø conjugation. These are treated as homophonic forms and have been counted twice in the figures given in Tables 15 and 16 above. The forms are:

a. kampa-Ø "to be cooking" kampa-L "to cook, burn"

b. tharpga-Ø "to enter" tharpga-L "to put in"

c. parnti-Ø "to be smelling" parnti-L "to smell"

d. puntha-Ø "to swim, be washed" puntha-L "to wash"

e. purranya-Ø "to smile" purranya-L "to like"

In a., b., c., and (in one reading) of d., the nominative NP of the -Ø conjugation verb corresponds to the accusative NP of the L-conjugation verb. However, in e. the nominative NP of purranya-Ø corresponds to the nominative NP of purranya-L.

It seems unusual for a language in this part of the world to have only two conjugations. The usual pattern is for Western Australian languages to have between three and six conjugations. Yinyjipartni, the
closest Ngayarda language to Panyjima, is reported to have four conjugations: P, L, N, R (Wordick 1979). Of the four conjugations, the L, N and R classes are morphologically very similar, differing only in certain inflections which have as their initial segment an apical nasal. All inflection initial apical nasals of the N-conjugation are alveolar, all those of the R-conjugation are retroflex. For example:

<table>
<thead>
<tr>
<th></th>
<th>L</th>
<th>R</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>past tense</td>
<td>-rna</td>
<td>-rna</td>
<td>-na</td>
</tr>
<tr>
<td>imperative</td>
<td>-rna</td>
<td>-rma</td>
<td>-nma</td>
</tr>
</tbody>
</table>

Wordick (1979) notes that all N-conjugation stems have /i/ as their final vowel. There are no instances of an L or R class verb with stem final /i/. Thus it is possible to collapse the L-conjugation and N-conjugation in Yinyjiparnti by writing just one morphophonemic rule:

\[ rn \rightarrow n /i+ \]

As noted in section 2.1 above, there is a tendency in both Yinyjiparnti and Panyjima for apical distinctions to be neutralized following the high front vowel /i/.

O'Grady (1966) reconstructs five conjugations for the proto-Ngayarda subgroup. Of the five conjugations, Panyjima retains only the L-conjugation and the S-conjugation - those which were most productive in the parent language and which correspond to the more productive conjugations in other parts of Australia (see Dixon 1980). The other three conjugations, two of which (*N and *NU), at least, had a limited number of members, have disappeared in Panyjima though they can be identified in other Ngayarda languages. O'Grady suggests that in a number of instances, tense inflections have become bound to proto-verb roots thus forming the modern verb roots. In this way verbs such as *ya-N "to go" and *ma-N "to take", fused with their past tense inflections to give the modern Panyjima roots yana-P and mana-P (Fn. 14).
3.7.3 Verbal Inflections

Table 17 presents the verbal inflections for the two conjugations.

Table 17: Verb Inflections

<table>
<thead>
<tr>
<th>Inflection</th>
<th>φ</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>past</td>
<td>-nha</td>
<td>-rna</td>
</tr>
<tr>
<td>present</td>
<td>-ku</td>
<td>-lku</td>
</tr>
<tr>
<td>future (irrealis)</td>
<td>-rta</td>
<td>-larta</td>
</tr>
<tr>
<td>future (realis)</td>
<td>-kaji</td>
<td>-lkaji</td>
</tr>
<tr>
<td>perfect</td>
<td>-lha</td>
<td>-lalha</td>
</tr>
<tr>
<td>habitual</td>
<td>-wuru</td>
<td>-lwuru</td>
</tr>
<tr>
<td>imperative</td>
<td>-mə</td>
<td>-nma</td>
</tr>
<tr>
<td>hortative</td>
<td>-kara</td>
<td>-lkara</td>
</tr>
<tr>
<td>might (active)</td>
<td>-jara</td>
<td>-ljara</td>
</tr>
<tr>
<td>might (passive)</td>
<td>-puru</td>
<td>-lpuru</td>
</tr>
<tr>
<td>contrafactual</td>
<td>-rtanguru</td>
<td>-lartanguru</td>
</tr>
<tr>
<td>participle (active)</td>
<td>-jangu</td>
<td>-rnu</td>
</tr>
<tr>
<td>participle (passive)</td>
<td>-jangaanu</td>
<td>-rnananu</td>
</tr>
</tbody>
</table>

The table shows that there is a great deal of similarity between the φ-conjugation forms and the L-conjugation forms. For the most part, the L-conjugation forms simply involve the prefixing of the conjugation marker -l- to the φ-conjugation forms. Where this would otherwise result in a lateral/nasal cluster, the conjugation marker becomes -n-, as in the imperative. Where a sequence not permitted by the phonotactic constraints of the language would result, an epenthetic vowel /a/ is inserted between the conjugation marker and the inflection.

The various inflections listed in Table 17 each have a number of different syntactic and semantic functions. In sections below I will describe each particular inflection in turn, giving illustrative examples.
Past Tense -nha/-rna

The appearance of this verb inflection indicates that the event denoted by the verb happened, or was happening, before the time of utterance. Typically, the time is interpreted as recent past and the event is seen as having some relevance to present events.

136. punyupunyu-wi-nha=rru, jampa =rta purrpa=layi
calm -INCH-PST=NOW moment=FOR later =TAS
wiyurrp=O kampa-mmyi-rta ngarnaw purrpa=layi.
heart -OCH heat -RECP-FUT again later =TAS
"They've calmed down now, a moment later and their hearts
will be heating each other up again."

137. ngunha-Ø mimi -nha-Ø katama-rna yukurruru-ku
that-NOM MoBro-PNC-NOM hit -PST dog -ACC
ngatharntu-ku karnti-ngarni-Ø.
1sgSEC -ACC stick -HAVE-NOM
"That uncle of mine hit my dog with a stick."

138. panu=warlarut kurlkatharta-ku ngatha mirta
very=INTENS deaf -ACC 1sgNOM not
wangka-nha nyinku.
say -PST 2sgACC
"That's right! he's deaf, I didn't tell you."

Past tense inflection is not restricted to main clause verbs. Examples 139 and 140 show past tense inflected verbs in relative clauses.

139. nyiya-Ø marlpca-Ø paka-rna wiya-larta ngaju
this-NOM man -NOM come-PST see -FUT 1sgACC
thala-nguli-nha-Ø yawarta-ju-Ø.
kick -PASS-PST-NOM horse-INST-NOM

"This man, who got kicked by a horse, came to see me."

140. nyinta wiya-rna ngunha-yu palya-yu
2sgNOM see -PST that -ACC woman-ACC
mhantha-nnguli-nha-ku nyurna-ngku?
bite -PASS -PST-ACC snake -INST

"Did you see that woman who got bitten by a snake."

Present Tense -ku/-lku

Present tense marks that the event denoted by the verb is continuing at the time of utterance. Numerous examples of present tense inflected verbs in main clauses can be found throughout the thesis. Present tense inflection also occurs on verbs in subordinate clauses in which case it often has an imperfective sense, the tense being understood as being the same time as that of the matrix verb.

141. ngatha palya-yu -Ø with-ma -lku-Ø panti-nha,
1sgNOM woman-ACC-NOM play-CAUS-PRS-NOM sit -PST
ngunha-Ø ngaju paja-yi -nha =rla palya-ngaraia.
that-NOM 1sgACC wild-INCH-PST=FORE woman-INCAUSE

"I was sitting playing around with a woman, he's wild with me over that woman."

142. ngunha-Ø marlpa-Ø marrkara-ku wantha-nauyi-nha
that-NOM man -NOM brother-ACC leave -RECIP-PST
yikaku-Ø =rla yana-rta-Ø mantu-ju-Ø watharri-ku-Ø.
alone-NOM=FORE go-FUT-NOM meat-ACC-NOM look for-PRS-NOM
"That man has left his younger brother behind to go looking for meat on his own."

Future Tense  

On main clause verbs, future tense inflection indicates that the event denoted by the verb is likely to come about in the future. Future tense is also the usual marker of purposive subordinate clauses.

143. ngatha nyinku wiya-larta purrpa=rru.  
1sgNOM 2sgACC see-FUT later =NOW

"I'll see you later."

144. ngunha-ŋ mirta ngaju kuliya-lku, ngatha mirra -rta  
that-NOM not 1sgACC hear-PRS 1sgNOM sing out-FUT

ngunha-yu marlpa-yu.  
that -ACC man -ACC

"He didn't hear me, I'll sing out to that man."

145. nyiya-ŋ mama-ŋ karri-ku jilya-yu thanatharntu-ku  
this-NOM Fa-NOM stand-PRS child-ACC 3sgGEN -ACC

palha-ma -lku nyarru-wayi-rta-ku parlkapi -la -ku.  
paint-CAUS-FUT dance -INCH-FUT-ACC coroborree-LOC-ACC

"This father is painting up his kid to dance in the coroborree."

Future inflection may also be used to indicate a mild imperative.

146. panha-ngka nganyja-ka purnta-yu warama-larta!  
that -LOC sand -LOC hole -ACC make -FUT

"Make a hole in that sand."
Realis Future -kaji/-lkaji

While the -(la)rta future inflection is essentially an unmarked irrealis future, the -(l)kaji inflection has more of a realis sense. This inflection marks that the speaker is committed to the belief that the event denoted by the verb will definitely occur. Like the irrealis future, the realis future can be used to mark purposive subordinate clauses (see example 149 below).

147. wantha-nma parrka-ŋi ngali ngarna-kaji
    place -IMP leaf-NOM idl(inc)NOM drink -RFUT
    nyilarnmarra-ku.
    drink -ACC

    "Put in the tea leaves and we'll have a drink!"

148. nyinta yana-rta ngarntamurra, ngaliyakuru patha-larta
    2sgNOM go -FUT again ≈FORE 1pl(exe)NOM blow -FUT
    warrkunti-ngarni-ŋ nyinku mirnu-ma-lkaji
    boomerang-HAVE-NOM 2sgNOM know-CAUS-RFUT

    "You go again and we'll give you a good hiding with
    boomerangs, we'll teach you!"

149. manartu-ku=rla mana-rta partirri -ku karla -yu
    good -ACC,ORE get -FUT Kanyji bush-ACC firewood-ACC
    kampa-kaji-ku warruwanarra-ku.
    burn -RFUT-ACC all night -ACC

    "Get that good kanyji bush firewood to burn
    all night long."
Perfect Aspect  -lha/-lalha

The perfect inflection indicates that the event denoted by the verb was completed before the time of utterance or, if in a subordinate clause, before the time denoted by the tense of the matrix verb. While verbs marked with the perfect inflection can occur as the main verb in a sentence, they are most often found in relative clauses, particularly subject T-relatives. Verbs marked with perfect inflection serve an important function in the chaining of events in narrative discourse. In relating a sequence of events the perfect is used to indicate that one event follows on the completion of the earlier event. Commonly, the verb occurs with perfect inflection augmented by the 'tense axis shift' clitic =layi (see section 3.6.1.13 below) without NP arguments. Example 150 illustrates this use of the perfect.

150. karla-Ø kampa-nna palangu nganyja-ka;
fire-NOM burn-IMP there sand-LOC
jinta-yi-lha=layi, kampa-nna martumirri-Ø
coal-INCH-PERF:TAS cook -IMP damper -NOM
"Light a fire there in the sand; once it's burnt down to coals, cook the damper!"

The examples below illustrate the use of verbs inflected for perfect aspect in subordinate clauses.

151. ngunha-Ø julu -nha-Ø kalha-Ø putanyja-Ø
that-NOM old man-PNC-NOM balls-NOM showing-NOM
panti-lha-Ø karlp-nya=rru.
sit-PERF-NOM get up-PST=NOW
"That old man who was sitting with his balls showing, has gotten up now."
Habitual Aspect -wuru/-lwuru

Verbs inflected for habitual aspect are largely independent of any tense reading. In most cases the time reference is understood as distant past with the sense "used to V". In many cases the correct tense reading can only be gleaned from context. Notice that in example 154 there is no indication of the tense until the final clause.

153. ngatha mirnu-∅ warama-lwuru jakilpa-∅
    1sgNOM know-NOM make-HABIT headpad-ACC

    kupija -∅ =mu =rla.
    little-NOM=THEN=FORE

    "I used to know how to make spinifex headpads when I was a little fella."

154. ngatha karlpa-wuru yarnta-ngka karlpa-jangu-la. ngatha
    1sgNOM get up-HABIT sun -LOC get up-REL -LOC 1sgNOM

    karlpa-wuru kumpa-yu-∅ mirta=mu mani -yu -∅
    get up-HABIT face-ACC-NOM not-THEN others-ACC-NOM

    wiya-lalha-∅. ngatha kunyanngu -∅ =rru, mirta
    see -PERF-NOM 1sgNOM sleepy fella-NOM=NOW not

    karlpa-wuru arlipa-la.
    get up-HABIT early-LOC
"I used to get up as the sun was getting up. I used to get up before anyone else (not yet having seen the others faces). I'm a sleepy fella now, never get up early."

155. panha-Ø, dukurru-Ø. janka-nma pajarrangu-Ø panu-Ø
that-NOM dog-NOM tie -IMP vicious -NOM very-NOM
nhantla-lwuru.
bite -HABIT

"Tie up that dog. He's very vicious, always biting."

Imperative Mood -ma/-nma

Imperative verb forms appear to occur only in main clauses. They allow only second person subjects which may or may not be overtly present. As noted in the sections on nominal morphology, the arguments of a two place imperative verb are both unmarked (i.e. in nominative case), while with a three place imperative verb, the goal or recipient is unmarked and the patient takes accusative case marking. This phenomenon will be further discussed in a later section. Examples of verbs marked for imperative mood can be found throughout the thesis.

Hortative Mood -kara/-lkara

The hortative only occurs in the corpus with first person non-singular inclusive subjects. Like imperatives there is often no overt marking of the subject.

156. panti-kara nhangu malu-ngka thitha-rrri-ku
sit -HORT here shade-LOC wait-COLL-PRS
mantu-ngarni-ku paka-larta-ku.
meat -HAVE -ACC come-FUT -ACC

"Let's sit here in the shade and wait together for that man with the meat to come."
157. ngali ngarna-kara=rru mantu-muntu-ŋ martu=iri-ŋ. ‘dl(inc)ROM eat -HORT=NOW meat -AND=ROM damper -NOM

"Let's eat some meat and damper."

Sentence 157 shows a supposedly transitive object NP without accusative marking. It is possible that hortative verbs require much the same system of case marking as verbs in imperative mood (at present there is not enough data to make this clear). Certainly hortative and imperative are very similar in other respects. While imperative is restricted to second person subjects, hortative is restricted to first person non-singular (inclusive) subjects, and in both cases there is most often no overt marking of those subjects. Hortative and imperative have a very similar illocutionary force: in both, the speaker suggests to the addressee that the addressee perform some action in the near future. In hortative mood the speaker is further indicating that he will also perform the action.

Might (active) -jara/-ljara
(passive) -puru/-lpuru

The inflections indicate that the speaker believes that the event denoted by the verb may occur in the near future. There is not quite the same degree of possibility of outcome as with the future irrealis inflection. Typically, the expected event is unwanted and the inflections often have an aversive sense. Examples 158 to 161 illustrate the use of the active might inflection.

158. nyinta yana=ma=rru jilya-ŋ wangka-yu walyi=ma-ljara. 2sgNOM go -IMP=NOW child-NOM word-ACC bad-CAUS-MIGHT

"Go away kid, you'll put the words out of our heads."

159. jilyanthurri-ŋ kampa -jara karla-ngka, karri=ma children -NOM be burning-MIGHT fire -LOC stand-IMP

karrpa=kumpal
far =LIKE
"You kids might get burnt in the fire, stand away from it!"

160. nyiya-ŋ=rla papa-ngka jirrmayi-rta pilanyu-ŋ=rru
this-NOM=FCRE water-LOC jump -FUT scared-NOM=NOW

nhungurikarta-yi-ŋara.
drown. -INCH-MIGHT

"This one's scared to jump in the water lest he drown."

161. ngatha papa-ngka ngarri-jangu-la yirrinya-la papa-ngka
1sgNOM water-LOC lie -RFL -LOC road -LOC water-LOC

yarta-ngka=m, mirria=m, papa-jinpa-ŋi-ŋara.
many -LOC=THEN nth=THEN thirsty-INCH-MIGHT

"I'll go on the road while there's a lot of water lying on it, I won't perish then (I might otherwise)."

The following examples illustrate the use of the passive might inflection. Example '163 is taken from the Paethupatha avoidance language.

162. ngatha pilanyja -yi-ŋku katama-lpuru ngunha-jirri-lu
1sgNOM frightened-PRSn hit-PMIGHT that-PLURAL-INST

jilyuntharryri-ŋu.
children -INST

"I'm frightened I might get hit by those children."

163. ngatha nguyawali pinikayi-rta ngapinya-lpuru
1sgNOM there go -FUT thing -PMIGHT

warntalykarta-puru.
something bad-PMIGHT

"If I go there I might get hit."
164. nyiya-yu kurrjarta-ku karnku-larta, mara-ngka
this-ACC spear -ACC keep -FUT hand -INST
karnku-lz-ta, wiyalarra-larta, paka-jara-ku
keep -FUT look after-FUT come-MIGHT-ACC
mani -ngku mana-puru-ku.
other-INST get-MIGHT-ACC

"Keep this spear, keep it in your hand, look after it
lest it break or get taken by the other mob."

Notice that that the passive might inflection is identical in form
to a locative suffix on nominals, -puru, which I have glossed as BEHIND
(see section 3.7.1 above). At present I am considering the two suffixes
as homophones.

Contrafactual -rtanguru/-lartanguru

So far I have been able to discover only one contrafactual in
Panyjima. This contrafactual appears in the data only with first person
singular subjects and has a self admonishing tone. Again, the time
reference of a sentence bearing a verb with this inflection is generally
gleaned from context. When the reading is past tense, the contrafactual
indicates that the event denoted by the verb did not take place but that
the speaker believes it should have taken place (see examples 164 and
165). When the reading is present tense, again the event is not taking
place but the speaker believes it should be (see example 166). When the
reading is future tense, the speaker is indicating that he believes the
event will not take place unless he makes a special effort to see that it
does take place (see example 167).

164. ngatha ponti-rtanguru yurlu-ngka panti-rtu
1sgNOM sit-CONTRAFACT camp-LOC sit -FUT
punyurra-β =mu.
warm -NOM=THEN
"I should have stayed at home to stay warm."

165. ngatha kampa-lartanguru pirri -ngka=mu mantu-yu,  
1sgNOM cook -CONTRFACT afternoon-LOC=THEN meat-ACC

nyiya-ŋ kwarrirri-languka -yi -nha=rru mantu-ŋ. ngatha  
this-NOM now -LOC rotten-INKCH-PST-NOW meat-NOM 1sgNOM

wiya-lartanguru puka -yi -jarakw-ku mantu-yu  
see -CONTRFACT rotten-INKCH-MIGHT-ACC meat-ACC

ngunhenmu=rla.  
that time=FORE

"I should have cooked this meat yesterday afternoon. It's  
gone rotten now. I should have seen it might go rotten  
at that time."

166. ngatha jilyantharrri-ku kwarrirri=rru mirra -rtanguru.  
1sgNOM children -ACC now =NOW sing out-CONTRFACT

"I should sing out to the kids now."

167. ngatha yana-rtanguru wiya-larta ngunha-yu  
1sgNOM go-CONTRFACT see -FUT that -ACC

warrungkamu-la=lwyi.  
tomorrow -LOC=TAS

"I should go and see him tomorrow."
The contrafactual verb marker looks suspiciously like the future tense inflection, -(la)rta, augmented by the ablative case inflection -nguru. It is not unusual to have a verbal word further inflected for case in Panyjima and so this analysis is at least worth pursuing.

While the irrealis sense of the -(la)rta future is quite compatible with the contrafactual sense described above, it is not so easy to see how the ablative may be related. However, it is clear that the ablative can be used to mark 'motion' away from some point in time (see example 29 in section 3.2.1 above). Generally this motion is away from a point in the past towards the present. Where the contrafactual sentence is given a past tense reading (as in 164 and 166 above) there is a sense in which the speaker has moved away from a point in time at which action resulting in the 'factual' was possible. If time is viewed as a linear flow (and it appears that the Panyjima see it this way), then, even in the present there is a sense in which the speaker is constantly moving away from points in time at which the particular action was possible.

Interestingly, Blake (1977) notes that in Pitta-pitta the ablative suffix can be attached to the past tense form of the verb to give a reading 'after'.

Relative Participle -jangu/-rnu

I have glossed this inflection as 'relative' although it might be considered a participle. It only occurs in relative clauses (both NP-relative and T-relative, Hale 1976) and the subject of the relative must be different from that of the matrix clause (i.e. it never occurs in subject relatives). The inflection -jangu may be related to the Western Desert different subject purposive switch reference marker -jaku.

The relative verb marked with -jangu/-rnu has an imperfective reading, the tense being the same as that of the matrix verb. Examples can be found throughout this paper. Note that in accusative marked relative clauses, the -jangu inflection does not take accusative marking though it can take other case inflections in other relatives. The -rnu inflection can, however, take accusative case. For further discussion of this see section 2.4.4 above.
Passive Perfect Participle -jangaanu/-rnaanu

Verbs (transitive) inflected with this participle suffix may occur in main clauses and in subordinate clauses. The use of the inflection appears to indicate that the verb action has effected a change (in state, status, of mind, action) in the subject of the verb, a change which in many cases cannot be reversed. The inflection is very common with the verbs waremama- "to make", mirnu-ma- "to teach, show", and change of state affect verbs. Like derived passives and verbs with passive might inflection, the subject of the participle is the 'undergoer' of the verb, while the 'actor' is marked with instrumental case. However, since the use of the participle focuses on a change in the undergoer, the actor is very often not overtly specified. In many cases (such as in 170 and 169 below) no identifiable agent can be understood.

168. panaa-Ø yaiha -Ø ngayi-rnaanu wirripi-ngku.
that-NOM bough shed-NOM throw-PASSPART wind -INST
"That bough shed was wrecked by the wind."

169. panaa-Ø yukurru-Ø kutu-ma-rnaanu warrkunti-ngarni-lu.
that-NOM dog -NOM dead-CAUS-PASSPART boomerang-HAVE-INST
"That dog was killed (by someone) with a boomerang."

170. nyiya-Ø kurrjarta-Ø warema-rnaanu mirli-nguru.
this-NOM spear -NOM make-PASSPART codjeput-ABL
"This spear is (was) made out of codjeput wood."

171. ngaliyakuru ponti-nha nhangu wangka-yu wajuma -iku
1pl(exc)NOM sit -PST here word -ACC straighten-PRES
marntamarangka-lu wangka-jangaanu thurrkunma-larta
policeman -INST tell -PASSPART straighten-FUT
"We sat here and straightened out the story, having been told to straighten out the story by the policeman."

The long vowel in -jangaanu/-rnaanu is very unusual, it is one of very few non-initial long vowels in Panyjima (see section 2.1.2). It is very likely that this verbal inflection has been borrowed from Yinyjiparnti which has the same inflectional form of the passive participle. Due to the a history of dramatic lenition, non-initial long vowels are very common in Yinyjiparnti.

3.7.4 Verbal Derivational Morphology

In the following sections I will discuss the derivational morphology of Panyjima verbs. The suffixes discussed have the effect of creating new verb stems of a particular conjugation which then take inflectional morphology dependent on that conjugation. The majority of verb forms found in Panyjima are derived forms. Some, though not all, of the derivational affixes described below can be suffixed to nominal roots (to create verbs) and to verb roots (to create new verbs). In almost all cases the derivations involve some change in both the semantic and syntactic properties of the root. It is not clear at this stage just how productive some of the derivational processes are. It is quite possible that some of the derivational affixes, such as -pi- and -thu- (see sections 3.7.4.3 and 3.7.4.4 below), are restricted to certain classes of nominal and verbal roots, but this has not yet been checked extensively.

Each of the derivational suffixes is discussed in turn and examples of derived forms given.

3.7.4.1 Causative -ma-

The -ma- causative is usually attached only to nominal stems (which may be inflected for case) to form verb stems of the I-conjugation. The verbs so formed are typically transitive but need not be. The list below
gives examples of both intransitive and transitive verbs formed with the
-ma- causative.

parli-ma-L  
bent-CAUS-  "to bend, make bent (tr)"

surrartu-ma-L  
bruise-CAUS-  "to bruise, make bruised (tr)"

karununyju-ma-L  
weather -CAUS-  "castrate, make a wether (tr)"

warrpala-la-ma-L  
spearthrower-LOC-CAUS-  "to load onto a spearthrower (tr)"

ngurriny-ma-L  
swag-CAUS-  "to roll a swag (int)"

karla-ma-L  
fire-CAUS-  "to make a fire (int)"

pili-mu-L  
cave-CAUS-  "to open up your feelings, make feelings clear, 'make a cave of your heart' (int)"

ngayiny-ma-L  
breath-CAUS-  "to breathe (int)"

jitumpulu-ma-L  
sausage-CAUS-  "to make sausages (int)"

Notice that all of the verbs listed can be glossed as "to make X". The transitive verbs all involve the ascription of some property denoted by the nominal stem to the accusa. ve marked object of the verb. The intransitive verbs, on the other hand involve the creation, making of the object denoted by the nominal stem. While the intransitive verbs shown above look very much like cognate object verbs (see Austin 1980a),
they do not appear to take accusative marked complex object noun phrases.

It might be argued that the transitive versus intransitive results of the -wa- suffix be used to distinguish adjectives from nouns in Panyjima. While it is certainly often the case that the more 'nouny' nominals tend to form intransitives with -ma-, it is not always the case. It is true, however, that where 'nouny' nominals form transitive verbs the meaning of that verb is often not predictable. For example:

- **mirli-ma-l**  
  "to spear (tr)"

- **cadjeput-CAUS**

- **jina-ma-l**  
  "to track (tr)"

- **foot, track-CAUS**

In a number of cases -ma- is found suffixed to verb stems to produce new verb stems. The only transparent examples found to date are:

- **pirturwanyji-ma-l**  
  "to trip (tr)"

- **trip over(int)-CAUS**

- **jaja-ma-l**  
  "to make stop talking, doing (tr)"

- **being ends together(tr)-CAUS**

There are quite a number of verb stems ending in /ma/ in the corpus for which no root has yet been isolated and it may be that some of these are also verb roots.

3.7.4.2 Inchoative

The inchoative has the following allomorphy (see section 2.2 above):

- **-yayi-**  
  / CV(C)Ci_

- **-wayi-**  
  / CV(C)Cu_

- **-wi-**  
  / CV [(C)CV]* (C)Cu_
The inchoative attaches to nominal stems to form verb stems of the \( \phi \)-conjugation. The derived verbs are usually intransitive and mark that the subject of the verb comes into the state \( \phi \)-noted by the nominal stem. Some intransitive examples are:

- **warrpa-yi-\( \phi \)**  
  "get to be a distance away (int)"
- **far -INCH-**
- **warnku-wayi-\( \phi \)**  
  "become a bend (a river) (int)"
- **bend -INCH-**
- **maatha-yi-\( \phi \)**  
  "get to be the boss (int)"
- **master-INCH-**
- **witi-yayi-\( \phi \)**  
  "be playing (int)"
- **play-INCH-**
- **manartu-wi-\( \phi \)**  
  "become good (int)"
- **good -INCH-**
- **yarrpala-yi-\( \phi \)**  
  "be sweating (int)"
- **sweat -INCH-**

A number of verbs derived with the inchoative may take accusative marked NP objects. Some of these are:

- **tharl1-ngka-yi-\( \phi \)**  
  "to ride on horseback (a horse) (atr)"
- **on horseback-INCH-**
- **panhapanha-yi-\( \phi \)**  
  "to organize (something) (atr)"
- **that (redup) -INCH-**
- **nyarru-wayi-\( \phi \)**  
  "dance (a dance) (atr)"
- **dance -INCH-**
Notice that all of these verbs are what we have called 'ambitransitive'. It is also clear that a number are cognate object verbs.

3.7.4.3 Processive -pi-

This suffix attaches to nominal and verbal stems to form verb stems of the I-conjugation. The resulting verbs describe an event which either consists in a continuous process, or which consists of a series of repeated punctual actions (Fn. 15). Only a few examples have been found in which it is possible to independently identify the stem and these are given below. A number of other verbs in the data show what might be the -pi- suffix and these are all semantically compatible with the description of the suffix given here (Fn. 16).

**Iterative:**

- kulu-pi-L **louse-PROC-**
  
  "to delouse, remove head lice (tr)"

- kulha-pi-L **squashed-PROC-**
  
  "to squash, crush by repeated action (tr)"

- murnaji-pi-L **turn-PROC-**
  
  "to take turns at doing (int)"

- paka-pi-L **break(tr)-PROC-**
  
  "to break into pieces (tr)"

**Processive:**

- witi-pi-L **play-PROC-**
  
  "to play, flirt with (tr)"
karalili-pi-l  "become daylight (int)"
    day light-PROC
nyamparr-pi-L  "hurry up (int)"
    quick-rr-PROC-
pukany-pi-L  "go hunting on behalf of someone (tr)"
    hunting-PROC-
ganany-pi-L  "to continue to not recognize someone (atr)"
    who-ny-PROC-
wilka-pi-l  "proceed through a gap in the hills (int)"
    gap, saddle-PROC-

A number of verbs are not clearly either iterative or processive. For example:

wangkal-pi-l  "to argue with someone (tr)"
    say-1-PROC-
wayarr-pi-L  "to use up something (tr)"
    used up-rr-PROC-

3.7.4.4 Placement
    -thu-
    \rightarrow -tu-/ \{n,t\}

This suffix is attached to both nominal and verbal stems (both transitive and intransitive) and derives transitive verb stems of the I-conjugation. The suffix is clearly cognate with the common Australian monosyllabic verb thu- "to place put", which, in languages to the east of Panyijima (cf. the Western Desert dialects) is very productive in compounding with verbal and nominal stems to form new verb stems. When added to nominal stems the suffix forms a verb the sense of which is to place the object denoted by the nominal in some position. For example:

mangka-thu-l  "put a drinking straw into (tr)"
    straw-PLACE-
yapan-tu-L  "put hot cooking stones into (tr)"
hot stone-PLACE-

On verbal stems the suffix modifies the sense of the root to the extent that the verb action generally has a specific locational endpoint and is clearly controlled. On intransitive verb stems the suffix operates as a causative. The examples found so far are listed below.

panti-thu-L  "to set, sit down (tr)"
sit(int)-PLACE-
karlpa-thu-L  "to lift up (tr)"
go up(atr)-PLACE-
yinti-thu-L  "to lower (tr)"
go down(int)-PLACE-
thaas-thu-L  "to pour (into) (tr)"
send(tr)-PLACE-
ngarna-thu-L  "to bite into (tr)"
eat(atr)-PLACE-

There are four other verbs in the corpus which may involve the -thu-suffix but to date the stems cannot be independently identified.

parlpantu-L  "to drive a wedge into (tr)"
puluthu-L  "to visit (tr)"
pirtuthu-L  "to blow into, onto something (tr)"
warethu-L  "to say goodbye to (tr)"

3.7.4.5 Miscellaneous Processes

A fair number of verb stems in the corpus show what may be derivational morphology but of which there are not yet enough examples
to allow the setting up of semi-productive suffixes. All of the examples so far found are listed below.

-ri-
palkanyjarni-Ø  "to come around (a corner) (atr)"
pirrkajarni-Ø  "to peel off (int)"
wangkanyjarni-Ø  "to discuss with (tr)"
payamarni-Ø  "to buy (Eng, tr)"
juumarni-Ø  "to shoe horses (Eng, tr)"

-ja-
kunpi-ja-l  "to urinate (on) (atr)"
urine-  "to steal (tr)"
kuna-ja-l  "to defecate (on) (atr)"
faeces-  "to come near (tr)"
mina-ja-l  "to pick up along the way (tr)"
walk-  "to aim a spear at (tr)"
parntaja-l  "to find (tr)"

Quite a number of verbs are simply nominals with verbal inflections attached (or vice versa).

karlkatharra-Ø  "become a fork or junction (int)"
fork, junction-
milyula-l  "to steal (tr)"
hidden-
murnskarti-Ø  "to come near (tr)"
near side-
yurri-ngka-l  "to aim a spear at (tr)"
armpit-LOC-
witha-ngka-l | "to spit on (tr)"
| saliva-LOC-

There is one example of a verb formed by reduplication of a nominal stem:

jinajina-l | "to repeat, go over (tr)"
| foot(redup)-

3.7.4.6 Reciprocal

O-nyayi-
L-mayi-
→ -yi- / +ma+_

The reciprocal derivational suffix attaches to verbs to form typically intransitive verb stems of the 0-conjugation. The suffix attaches to both transitive and intransitive verb stems. On intransitive verb stems it indicates that the event denoted by the stem is performed collectively by the non-singular subject of the verb (examples 171 and 172 below). On transitive verb stems it indicates that the event is performed reciprocally (on each other) by the non-singular subject of the verb (examples 173, 174 and 175). In some cases the reciprocal may occur on transitive stems to indicate collective action (but see 3.7.4.7 below).

171. ngunha-kutha-O marlpa-kutha-O karri-nyayi-ku.
that -DUAL-NOM man -DUAL-NOM stand-RECIP-PRS
"Those two men are standing together."

172. ngatha wiya-rna nhupalukuru-kku panti-nyayi-jangu.
1sgNOM see -PST 2plACC sit -RECIP-REL
"I saw you mob sitting together."

173. ngunha-jirri-O palyantharrri-O wargka-nyayi-ku.
that-PLURAL-NOM :omen -NOM talk -RECIP-PRS
"Those women are talking to one another."

174. ngatha wiya-rna ngunha-kutha-ku jilya-kutha-ku
     tagNOM see -PST that -Dual-ACC child-DUAL-ACC
     thali-nmayi-jangu.
     kick -RECIPE-REL

"I saw those two kids kicking each other."

175. nitya-kutha-Ø warlipi-kutha-Ø pinyarri-ku katama-yi-ku.
     this -DUAL-NOM boy -DUAL-NOM fight -PRS hit-RECIPE-PRS

"These two boys are fighting, hitting each other."

Typically, in Australian languages, reciprocal verbs are always intransitive and must have non-singular subjects. This appears not to be the case in Panyjima. Reciprocal verbs may have singular subjects and may accusative marked NP arguments (thus suggesting they may be transitive). Reciprocal verb stems may also be further augmented by the passive derivational affix, as example 177 (below) illustrates. Example 185 is a sentence of the Paathupathu avoidance language.

176. ngunha-kutha-Ø yana-nyayi-ku wiya-nmayi-nga mayali-nju.
     that -DUAL-NOM go -RECIPE-PHS see-RECIPE-FUT FaFa -PNC

"Those two are going together to see their grandfather."

177. yikamarta-Ø=mpa karnku-nmayi-nguli-ku purungu-ngarli-lu.
     one -NOM=EMP keep -RECIPE-PASS-PRS -PLURAL-INST

"This one fella is being kept by the purungu mob."

178. nitya wiya-nmayi-nha mar-kara -ngarli-ku=rìa?
     2sgNOM see -RECIPE-PST young brother-PLURAL-ACC=FORE

"Did you(sg) see all your younger brothers?"
nyiya-yu kati-nyayi-rta jartunta-ku, jartuntarra-ŋ
this-ACC take-RECIP-FUT Bro-in-law-ACC So&So-in-law-NOM
yana-rta mantu-wali.
go -FUT meat -ALL

"Take this brother-in-law of yours, the two of you,
my son and son-in-law, go for meat then!"

nyinta mirta panti-nyayi-rta murnakarti-la
2sgNOM not sit -RECIP-FUT near side-LOC
ngunha-ngka ngajinu-la!
that -LOC sister-LOC

"Don't you(sg) sit alongside that sister!"

marrkara -ku wantha-nmayi-nha ngarti-mama-la-ku
young Br-ACC leave -RECIP-PST mother-father-LOC-ACC
wantha-nmayi-nha yikakula-ŋ yana-rta mantu-yu
leave -RECIP-PST alone -NOM go -FUT meat-ACC
watharri-ku.
look for-PRS

"He's left his younger brother with their mother
and father, to go on his own looking for meat."

nyinta jartunta-ku wangka-nsayi-rta, ngatha yana-rta
2sgNOM bro-in-law-ACC say-RECIP-FUT 1sgNOM go -FUT
wiya-larta ngunha-yu walypaln-ku.
see -FUT that -ACC whiteman-ACC

"You tell your brother-in-law, my son-in-law, that I'm
going to see that whitefella."
niyiya-0 karlpa-nyayi-ku wiya-larta panti-jangu
this-NOM go up-RECIP-PRS see -FUT sit -REL
karnti-ka-ku.
tree -LOC-ACL

"This one's climbing to see the fella
sitting in the tree."

kupartu-xi-ku ngunha-yu ngurama -yi-larta.
crawl-RECIP-ACC that-ACC creep up-RECIP-FUT

"(He's) crawling to creep up on that fella."

jaa-nmayi-ku ngunha-ngka purungu-la=rla ryirntiji-ku.
join-RECIP-PRS that -LOC -LOC=FORE belt -ACC

"He's putting a belt on the purungu fella."

Examples 176 and 177 both have a plural subject (underlying subject
in 176). It might be possible in these cases to treat the reciprocal
verb as having a collective reading, and then to treat the accusative NP
in 176, and the nominative NP in 177 as (underlying) transitive objects
of the respective verbs. Glosses might read:

186. (=176) "Those two are going together to see, together,
their grandfather."

187. (=177) "This one fella is being kept by all
the purungu mob together."

Examples 187, 179, 180 and 181 do not admit this explanation since they
all have a singular subject. It might be suggested that in these cases
the singular nominative subject and the accusative, or locative, object
are essentially both, together, the underlying subject of the reciprocal
verb, and that, for reasons of syntax or discourse topicalization, the
singular subject is separated out for special treatment, the other
participants being demoted into a non-subject category (Fn. 17). This
interpretation might give glosses as follows:

188. (=178)  "Did you and all your younger brothers see one another?"

189. (=179)  "You and your brother-in-law take one another and go for meat."

190. (=180)  "Don't you and that sister sit alongside one another."

191. (=181)  "This one and his younger brother have left one another, the one to stay with their mother and father, the other to go on his own looking for meat."

While 178 and 179 might be forced into the interpretation given by glosses 188 and 189, it is fairly clear that the glosses 190 and 191 do not fit the meanings of the Panyima sentences 180 and 181. The explanation does not account for the fact that in each case the subject (nominative marked participant in the active clause) has more control over the event denoted by the verb than do any of the non-subject participants. Examples 182, 183, 184 and 185 are cases where in no sense can a non-subject participant be considered part of an underlying subject of the reciprocal verb. If any non-subject NP is to be considered the participating subject in example 182, it is the locative NP not the accusative NP (as in 180).

So far we have not reached an adequate explanation of the fact that verbs marked for reciprocality occur in syntactic slots in which the non-reciprocal stems occur with very little difference in meaning. The examples 182 suggest that while the result of a particular reciprocal verb might be reciprocal action on the part of the subject and some non-subject participant (if only cooperation on the part of the non-subject participant), it is the subject which initiates and/or controls the action. Perhaps, then, the reciprocal is used as a device for marking the undergoer of the verb event as being not totally out of control of the situation. Certainly more work needs to be done before an adequate explanation of the facts represented by 176-185 above can be
proposed.

3.7.4.7 Collective -rri-

This morpheme is found suffixed to a very few verb stems producing a verb stem of the $\emptyset$-conjugation. The suffix indicates that the individuals denoted by the non-singular subject of the verb perform the event denoted by the verb together. Recall that verbs derived with the reciprocal suffix can also have a collective reading. The suffix -rri- seems to occur where, because of the particular sense of the verb, there can often be some confusion between reciprocal action and collective action readings. Some examples of -rri-derived verbs are:

- thitha-rri-0
- yinya-rri-0
- thurni-rri-0
- palha-rri-0

"to wait together (or (atr))"
"to give together to (ditr)"
"to laugh together at (atr)"
"to paint selves together in preparation for a ceremony."

Other verbs appear to have been derived by way of a suffix -rri- though it is not possible to identify the stems in Panyjima (at least at present). There does not appear to be much of a collective reading associated with these verbs. It is possible of course that a different suffix -rri- is involved here.

- watharri-0
- kurlarri-0
- pinyarri-0
- piyingkarri-0
- kapukurri-0
- nyiinirri-0

"to look for (tr)"
"to hop (a kangaroo) (int)"
"to fight (atr)"
"to explode (int)"
"to dream about (at)"
"to sing in a ceremony (int)"
It should be pointed out that a suffix -rri- is the productive inchoative verbalizer in Yinyjiparnti and is the productive reciprocal verbalizer in the Mantharta languages. Some of the Panyjima verb forms which show a suffix -rri- may have been borrowed either from Yinyjiparnti or from languages to the south. The suffix could then have been extended to other verbs in the language.

3.7.4.8 Consequential

The consequential derivational suffix derives verbs of the I-conjugation and does not alter the transitivity value of the stem to which it is attached. The function of the consequential is to indicate that the event denoted by the verb stem is a consequence of, or at least follows in time, the event denoted by the preceding verb in the utterance. Some examples are:

192. ngatha nyinku warathu-lku, yana-nguma-lku yurlu-wali.
   tagNOM 2sgACC farewell-PRS go -CONSEQ-PRS camp -ALL
   "I'll say goodbye to you now and go home."

   tagNOM go -FUT see -FUT that -ACC man -ACC
   see-CONSEQ-PRS other-ACC=TAS
   "I'll go and see that man, and see the other man at the same time (as a consequence)."

   tagNOM go -FUT see -FUT that -ACC
   return -INCH-CONSEQ-PRS thatAnLOC
   "I'll go and see that one and, as a consequence,
come back with him."

195. ngatha yinya-nguli-rtalgunha-ngku mar1pa-ngku
1sgNOM give-PASS-FUT that -INST man -INST
mantu-yu, yana-nguma-lku ngunha-wali.
meat-ACC go -CONSEQ-PRS that -All

"I'll be given the meat by that man, and, as a
consequence, I'll go that way."

196. ngatha katana-larta jilya-yu nyi.ya-yu, thana
1sgNOM hit -FUT child-ACC this-ACC 3sgNOM
paka-rnuma-lku ngathala marnu-0.
come-CONSEQ-PRS 1sgLOC fine-NOM

"I'll hit this kid, he'll come along fine with me then."

Notice that all the consequential marked verbs in the above examples
have present tense inflection. I have found no examples which do not
carry present tense. The time reference of the consequential verb is
subsumed under that of the previous verb. Also notice that in almost
all cases the subject of the consequential verb is identical with that
of the preceding verb. Where this is the case, the subject is never
repeated in the consequential clause. Example 196 is the only example
found to date in which the subject of the consequential verb is
different from that of the preceding verb (though the subject does occur
as a non-subject argument in the preceding clause).

The close relationship between the consequential clause and the
preceding clause suggests that the two be considered a co-ordinated
structure rather than independent clauses. The fact that the subjects of
the two clauses can be different argues against analyzing one or other
of the clauses as subordinate.

Since the consequential affix only occurs with present tense
inflection we might choose to treat the affix-plus-inflection as a single
inflection morpheme marking some aspectual relationship between the
verb and the preceding verb. Wordick (1979) chooses this analysis and
describes the two Yinyjiparnti affixes ð-ngumarnu and L-rnumarnu as 'Progressive Aspect' markers. These suffixes appear to be syntactically and semantically equivalent to the Panyjima suffixes. Notice that in Yinyjiparnti the consequential suffix (assuming the Panyjima analysis) is augmented by the suffix -rnu. This suffix occurs in Yinyjiparnti as a marker of imperfective aspect in main clauses, and is the general participial relative clause marker (as it is in Panyjima). In that the present tense in Panyjima often occurs in subordinate clauses as a marker of imperfective aspect there is clearly a close resemblance between the Panyjima and Yinyjiparnti consequential affixes. The facts suggest some parallel development in the fossilizing of the derivational suffix and its following inflection in the two languages.

What of the forms of the consequential derivational suffixes? The L-conjugation form of the suffix, -rnuma-, could be analyzed as the 'imperfective' or subordinating relative participial suffix -rnu-, plus the -ma- causative derivational suffix. Similarly, the Ø-conjugation form could be analyzed as a suffix -ngu- plus the -ma- causative. While the -ngu- suffix does not occur in Panyjima (the relative participial suffix is -jangu) it does occur in Yinyjiparnti. Yinyjiparnti has -ngu marking imperfective aspect in main clauses, and -yangu (< 'jangu) marking relative clauses. If we were to analyze the -rnu- and -ngu-suffixes in the consequential as participle markers, then the following syntactic pattern in the proto-language might be suggested, from which the modern consequential sentence structure is a descendant.

It is possible that the verb marked with -nguma/-rnuma- was in fact a main verb with a sentential subject. For example, sentence 195 (above) might have appeared as 197.

197. ngatha=Ø yinya-nguli-rtɑ=Ø ngunha-ngku=Ø
1sgNOM-NOM give-PASS-FUT-NOM that-INST-NOM

marlpa-ngku=Ø wantu-yu=Ø yana-ngu-ma-iku ngunha-wall. man -l ST-NOM meat-ACC-NOM go-PART-CAUS-PRS that -ALL

"I'll be given meat by that man, causing (my) going that way."

While this analysis captures the strong coreferential subject
preferences of the modern co-ordinate structure and the one tense reading for the structure, it does not cope with the fact that in the modern language tense is marked on what would have been the subordinate verb. More detailed examination of the grammars of Panyjima, Yinyjiparnti, and of the other Ngayarda languages must precede a full attempt at reconstructing the syntax of the consequential suffix.

3.7.4.9 Passive

The passive derivational suffix derives verbs of the /-conjugation. The suffix is fully productive on verb stems where it operates with a purely syntactic/pragmatic function as described below.

The passive suffix (form -nguli-) also occurs on a limited number of nominals restricted to body parts and nominals referring to psychological states. An example of the latter is:

nhaka-nguli-Ø

cold feeling-PASS-

"become cold, feel cold"

In cases such as this the passive derives an intransitive verb (i.e. it functions as an inchoative) referring to the entry of the subject into a particular psychological state. The morpheme -nguli- also occurs in the Mantharta languages with exactly this semantic/syntactic result (see for example Austin 1980c).

When the passive suffix attaches to body part nominals an intransitive verb is derived carrying the sense that the (human) subject of the verb is troubled by a pain in, or a lack of function of, that body part. For example:

198. ngatha thurla-nguli-ku.
1sgNOM eye -PASS-PRS

"I've got eye trouble."

199. ngatha putha-nguli-ku.
1sgNOM head -PASS-PRS
"I've got a head ache."

    that-NOM man -NOM knee -PASS-PRS poor -NOM very-NOM

"That man's got knee trouble the poor fella."

The use of passive on body parts might also be treated as entry into, or existence in, a psychological state: body parts are largely taken for granted until a pain or lack of function in them forces them into explicit awareness.

On verb stems the passive has the sole function of deriving verbs which have as their nominative marked NP the undergoer of the event denoted by the verb. In that clause subordination pivots on the nominative marked NP subject of the subordinate clause, the passive plays an important role in clause chaining. The passive affix only occurs on verbs which may have one or more accusative marked NP objects. Where the actor NP occurs in a passive clause it is marked with instrumental case (or, though less commonly, with the causal inflectional suffix -mari, see section 3.2.1 above). Notice that when a passive suffix occurs on a nominal no instrumental marked actor can occur. Indeed it is difficult to construct a sense in which an actor could occur with these verbs. In that the sole (nominative) argument of these verbs is the experiencer of the psychological state, it could still be called an undergoer.

Although the passive on nominals derives a stative, there is no evidence that the passive, where it occurs on a verb stem, effects any change in the stativity of that stem. Therefore, we might choose to treat the nominal passive and the verbal passive as two homophonous morphemes, the one deriving stative verbs, and the other having a solely syntactic function. However, on historical grounds we may want to relate the two suffixes more closely. If we accept the historical change from an ergative to an accusative case marking system with the concomitant development of a passive, we may need a source from which the passive deriving morpheme originated. It is possible that the use of the morpheme on nominal roots might reflect an earlier stage of the language. The stative deriving inchoative may have spread to some verb roots thus forming the basis for an analogical spreading of the use of
the suffix to all transitive verb stems. Once the passive assumed the syntactic function of facilitating coreferential subordination, the suffix may have lost the semantic function of deriving statives.

A similar example of the development of a passive is suggested by Jeffers and Lehiste (1979) for Sanskrit. Here a suffix "assumed to have been a marker of intransitive change of state verbs in the parent language" has been reanalyzed as a productive passive derivational affix on transitive verb stems. Jeffers and Lehiste note that this change, based on a "perceived formal similarity between pairs of sentence types", necessarily involved some semantic shift. With the change of state intransitive verbs the notion of agency is irrelevant. However, the passive derivational affix, at the later stage, to a large extent implies an agent.

On present evidence it is difficult to construct a similar sequence of development for the Panyjima passive. In particular, there is no evidence of a syntactic structure upon which the syntactic passive could have been analogized. The gap between a de-nominalizing process restricted to a small class of nominals producing a verb which does not admit the notion of agency, and a productive syntactic derivational suffix occurring on (only) transitive and ambi-transitive verb stems and which implies an agent, is too much of a jump. To maintain the hypothesis that the change was due to analogy, a perceived formal similarity, we would want to construct an intermediate stage at which the suffix occurred on verb stems with some stative deriving effect, and at which the suffix also occurred, and perhaps more frequently occurred, on intransitive verb stems. The fact that in the modern language there are no hints that the suffix ever occurred on anything but verb stems which permit an accusative marked object, is rather a large stumbling block for the hypothesis.

3.7.4.10 Nominal Incorporation

A number of verbs in Panyjima involve the incorporation of a nominal onto a verb stem thereby forming a new verb stem. In particular, the verb karta-l "to stab, poke (tr)" occurs with a number of incorporated nominals. Some examples are:
In the following cases the root has not been identified:

jalarrkarta-L "water burbling down a waterfall (int)"
marrangkarta-L "to shield the eye with the hand (int)"
nhungurlkarta-L "to drown (int)"

The following two examples show incorporation on the verb ngayi-L "to throw, drop, impart motion (tr)"

kurlurr-ngayi-L "burnt hair to fall out while cooking (int)"
wirrili-ngayi-L "to throw a spear (atr)"

Other isolated examples which might be considered instances of nominal incorporation are:

marta-purri-L "to draw blood, pull blood (in)"
blood-pull-
pula-tharrpa-l "to aim for (tr)"
lump-insert-
3.8 Post Inflectional Clitics

Panyjima has quite a number of post-inflectional clitics. These can be divided into two sets: those which may occur on any part of speech, and those which only occur on verbs. The non-restricted clitics seem to form classes on the basis of their sequence on the word, co-occurrence restrictions, and semantic function. In the sections below I will describe the function of each clitic in turn, giving examples, and will then discuss the order within the post-inflectional clitic cluster.

3.8.1 Non-restricted clitics

3.8.1.1 Only

This clitic has a reading very like the English word "only". Some examples of its use are given below. The clitic is shown on a nominal in 201, on a verb in 202, and on a nominal inflected for accusative case in 203.

201. ngaliya warama-rna ngunhalku=rla winmilpa-ku, muri(exc)NOM make -PST thatAnACC FORE windmill-ACC

mani=rla winmilpa-ngarli-∅ marnu-∅ karri-ku.
others-NOM FORE windmill-PLURAL-NOM fine-NOM stand-PRS

yikamarta-∅=kanu paka-lha.
one -NOM=ONLY break-PERF

"We two fixed that windmill, the others are all okay. Only one was broken."
that-NOM man-NOM laugh-PRS laugh-PRS=ONLY
"That man's laughing all the time, only laughing."

203. ngatha wiya-rna yurlu-yu=kanu, yirntitila=mu yana-lha.
1sgNOM see-PST camp-ACC=ONLY already THEN go -PERF
"I saw only the camp, he'd already gone."

3.8.1.2 Contrastive =nhanu

This clitic indicates that the word to which it is attached is being contrasted with something referred to in an earlier part of the discourse. Notice that the scope of the clitic really extends only as far as the word to which it is attached rather than to the clause as a whole. The English expression "on the other hand" is a close approximation to the sense of this clitic. The clitic is shown on a particle in 204, on a nominal in 205, and on a verb in 206.

204. ngunha-jirri-ŋ ngarlarla-ku warama-lku, ngunha-ŋ=rla
that-PLURAL-NOM noise -ACC make -PRS that-NOM=FORE
marlpa-ŋ mirta=nhanu wangka-ku.
man -NOM not =CONT talk -PRS
"That mob's making a lot of noise, while that man isn't, on the other hand, talking."

205. nyiya-ŋ jilya-ŋ yanga-nguli-nha parnka-ku,
this-NOM child-NOM chase-PASS -PST lizard-INST
kurrumanthu-ŋ=rla ngunha-yu=nhanu marlpa-yu yonga-rna.
goanna -NOM=FORE that -ACC=CONT man -ACC chase-PST
"This kid was chased by a lizard, it was a goanna that chased that man on the other hand."
"The men hit boomerangs while the women clap their thighs."

3.8.1.3 Now

This clitic has a temporal sense. It marks that the time reference of the clause in which it appears differs from that of the previous clause. In effect it marks that the NOW of the last time reference (marked by tense) is considered past, and that a new NOW has been established. The use of the clitic constantly grounds the events of the discourse in the procession of real (or imagined) time. The clitic is shown on a verb in example 207, on a relative clause verb in 208, and on a particle in 209.

207. tharni nyinta yana-ku=rru!?
   where 2sgNOM go -PRS:NOW
   "Where are you going!"

208. tharlurapi -rnu-la =rru parikanu-ŋa-la, ngalikuru
   clouds come-REL-LOC=NOW cloud-NOM-LOC 1pl(inc)NOM
   yana-rta=rru ngunha-wali marnta-wali panti-rta
   go -FUT=NOW that -ALL hill -ALL sit -FUT
   marnta-ka pilin-gka=rru.
   hill -LOC cave-LOC =NOW
   "When the clouds are rolling over, we'll go then towards that hill, to stop in the cave on that hill."
3.8.1.4 Then

This clitic is complementary to =rru. It has a fixed time reference outside of the tense system. In using this clitic reference is made to a particular point in time which existed in the past or will exist in the future. When =mu occurs in an isolated utterance it is almost always read as referring to a point of time in the past. In that past events are already defined at a point in time, as against future (irrealis) events, this makes perfect sense. Indeed, =mu is often used in clauses with a non-tense inflected verb to indicate past time reference. =mu is used in reference to a point in the future only when that point is assumed to exist as a consequence of other events described in the utterance (for example 210 below), or when that point is confidently predicted or is assumed to be inevitable, as in the rising of the sun the next day (212 below). The clitic usually occurs on the first word in the clause but this does not appear to be a strict rule. In all the examples below the clitic occurs on nominals (Fn.18).

210. ngunha-jirri-ku thalitharnu -ku =rla wantama -larta, that-PLURAL-ACC riding horses-ACC=FORE split up-FUT

mangi-ru=rla karliny-ma-larta yawu-ngka=mpn
others-ACC=FORE return-CAUS-FUT same-LOC =EMP
"Split up those riding horses. Bring the others back and let them go in the same paddock. Shoe all those horses (in the paddock) now."

The kids have been sitting writing on the paper since this morning. Now that it's become afternoon, they're all coming back now. And now the kids in each camp are playing with one another."

"Lie down now! You'll be making a row before the sun is up."
213. ngatha mirnu-ŋ warama-lwuru jakilpa-ku
    nagNOM know-NOM make -HABIT headpad-ACC
kupija-ŋ =mu =rla.
little-NOM=THEN=FORE

"I used to know how to make spinifex headpads
when I was little."

3.8.1.5 Intensifier =warlaru

This clitic appears to have some temporal sense as examples 214 and
215 (below) show. In such examples the clitic appears to mean "always"
or "ever". However, in examples such as 216 and 217 it is difficult to
see any way in which =warlaru can have a temporal reading. For the
time being, the rather vague term 'intensifier' is used for this clitic. It
is probably cognate with the Yinyijparnti clitic =parlu which Wordick
(1979) also calls an intensifier. The clitic is shown following another
clitic in 214, on a verb in 215 and 216, and on a nominal in 216.

214. panha-ŋ jilya-ŋ panti-ku ngaji-ku=kanu=warlaru,
    that-NOM child-NOM sit-PRS cry -PRS=ONLY=INTENS
mirta=warlaru panti-ku ngaji-pati-la.
not =INTENS sit -PRS cry -PRIY-LOC

"That kid just cries all the time, never sits
without crying."

215. ngatha panti-ku=warlaru wàrtarlpa.
    nagNOM sit -PRS=INTENS north

"I've always lived in the north."
216. nyinta wiya-lalha=warlaru!

2sgNOM see -PERF -INTENS

"You saw him alright!"

217. kamayi-kutha-ŋ kati-ku minarli-ku=warlaru jilya-yu.

Mo3i -DUAL-NOM take-PRS own -ACC=INTENS child-ACC

"Two aunts are taking their very own niece."

3.8.1.6 Emphatic

=mpa

This clitic appears to be used to introduce something which the speaker assumes the addressee already has in mind. In some way the clitic emphasizes something which has already been identified in the discourse, or which has been inferred from the discourse. On verbs the clitic often means that the event denoted by the verb is predicated of some new participant where it is assumed that the event denoted by the verb has previously been identified with some other participant (for example, 218, 219 and 222 below).

218. ngatha nyinku panthu-na, nyinta panthu-rna=mpa.

1sgNOM 2sgACC touch -PST 2sgNOM touch -PST=EMP

"I touched you and you touched me too."

219. purrpa=layi mirru-wayi-rta=mpa nyarru-wayi-rta.

later =TAS know -INCH-FUT=EMP dance -INCH-FUT

"One day you'll learn how to dance too."

220. ngatna wangka-ku yika -ŋ =mpa nyinku! mirta

1sgNOM say -PRS finish-NOM=EMP 2sgACC not

parilha-yi-rta=rta!

still-INCH-FUT=FORE

"I told you to stop it! Don't keep on at it!"
221. nyinta=mpa kurra-nga yukurr-ku mani -ngku
2sgNOM=EMP cause -PST dog -ACC others-INST
kutu-ma-ningul-rla-ku.
dead-CAUS-PASS-FUT-ACC
"You were the cause of that dog getting
killed by the mob."

222. "ngatha wiya-rna kaki-yu panpa-jangu."
1sgNOM see -PST bird-ACC fly -REL
"ngananka=kumpa kaki=rla?"
what =LIKE bird=FORE
"mi'tal ngatha wiya-rna tharralyji-ku."
not 1sgNOM see -PST bellbird -ACC
"ngatha wiya-rna=mpa panpa-jangu, ngatha mirtamirnu-0
1sgNOM see -PST=EMP fly -REL 1sgNOM not know-NOM
ngunhalku ngananka -ku =rla."
thatAnACC something-ACC=FORE
"nyinta ngananka-ku parnparp=ku wiya-rna
2sgNOM something-ACC twenty eight-ACC see -PST
panpa-jangu, wiya-rna wirnti=nlrnti-ku=nta?"
fly -REL see -PST skyhawk -ACC=INT
"ngunhalku=mpa! ngatha wiya-rna wirnti=nlrnti-ku=mpa."
thatAnACC=EMP 1sgNOM see -PST skyhawk -ACC=EMP
"I saw a bird flying."
"What kind of bird was it?"
"Oh! I saw a bellbird."
"I saw something flying too. I dont know what that
thing I saw was."
"Was that something you saw a twenty eight parrot, or did you see a skyhawk?"
"That's what it was! I saw a skyhawk."

3.8.1.7 Like

This clitic marks a similarity in action or state between the subject of the clause within which it occurs and some previously identified participant or some previous event. Some examples of the use of this clitic are given below.

223. kutiya-∅ =r1a niiya-∅ =rru karri-ku
other-NOM=FORE this-NOM=NOW stand-PRS
punuyuniyu-∅ =kumpa.
not worried-NOM=LIKE

"Now this one's standing as if he isn't worried."

224. ngatharntu-∅ =r1a jina-∅ karrara-∅ =mpa,
1sgGEN -NOM=FORE foot-NOM sick -NOM=EMP
nyinkutharntu-∅ =kumpa.
2sgGEN -NOM=LIKE

"My foot's sore too, like yours."

225. nyarni-yayi-na=kumpa!
slow -INCH-IMP=LIKE

"Slow down!"

226. mirta yana-wuru purlarw=mu=kumpa=r1a warniwarayi-ku.
not go -HABIT first=THEN=LIKE=FORE go falling-PRS

"He didn't used to go along falling down like before."
3.8.1.2 Truth

This clitic indicates that the speaker believes in the truth of what he is saying, and that he is trying to convince the addressee of the truth of what he is saying. In some cases (eg. 228 below) it can be used as a challenge to the addressee to dispute the truth of the statement. The two examples below show the clitic on, firstly, a nominal, and then on a verb. Other examples can be found in section 3.8.1.9 below.

227. mirta kurlka-yi-nya nganangu =nyu
not ear -INCH-FUT someoneACC=TRUTH
ngapinha-ma -yi -lha.
thing -CAUS-RECIP-PERF
"Don't think about it, though it's true you killed someone." (Fn. 19)

228. ngunha-kutha-D kutu-ma -yi -nha, nhupalukuru panti-ku
that -DUAL-NOM dead-CAUS-RECIP-PST 2p1NOM sit -PRS
wiya-lku, mirta wantama -rna=nya!
see -PRS not split up-PST=TRUTH
"Those two killed one another and you mob just sat there, didn't split them up (did you)!

3.8.1.9 Dubitative

This clitic codes a comment by the speaker that he does not know, or is unsure of, the exact identity or value of the referent of the word to which the clitic is attached. In all the examples in which =rra appears either the clitic =nyu or the clitic =mpa also appears. The sequence =rra=nyu usually has the reading "I really don't know and I'm trying to make you believe I don't know". The sequence =mpa=rra has the reading: "I know there is an answer though I don't know what it is (but I believe you may know what the answer is)". The examples below illustrate both these sequences. In 229 and 230 the clitic sequence
=rra=nyu occurs on a nominal. In 231 and 233 the sequence =mpa=rra occurs on a nominal, in 232 it occurs on a verb.

229. nhupalukuru kaku puntha-kaji, ngatha=rla nhangu
2p1NOM can swim -RFUT 1sgNOM=FORE here
panti-rra nhupalukuru ku wiya-1ku puntha-jangu.
sit -FUT 2p1ACC see -PRS swim -REL
ngatha=rla mirtamirnu-β=rra=nyu puntha-rra
1sgNOM=FORE not know-NOM=DUB=TRUTH swim -FUT
puriya-la papa-ngka.
salt -LOC water-LOC

"You can swim, I'll sit here and watch you swimming. Really, I don't know how to swim in salt water."

230. ngaliya warrpa-karta=rra=nyu yurlu-karta
1dl(exo)NOM far -ALL =DUB=TRUTH camp -ALL
ngunha-karta.
that -ALL

"Truly, we've got a long way (I don't know how far) to go to get to that camp."

231. nganangutharntu-β=mpa=rra yukurru-0 ngarna-nha
someoneGEN -NOM=EMP=DUB dog -NOM eat -PST
mantu-yu ngatharntu-ku.
meat-ACC 1sgGEN -ACC

"Someone's (I don't know whose) dog ate my meat."
232. ngananha-yi-nha=mpa=rra?
what -INCH-PST=EMP=DUB

"What happened (I don’t know)?"

233. mirta=warlaru warathu-rna mani -yu =rla, yana-nha
not =INTENS farewell-PST others-ACC:FORE go -PST
wangka-pati=∓=warlaru, mirta wangka-nha=nyu ngalikuruku,
word -PRIV-NOM=INTENS not talk -PST=TRUTH 1d1(inc)ACC
paja-ya -jura ngalikuruku ngananha-ngarala=mpa=rra.
wild-INCH-MIGHT 1pl(inc)ACC something-ICAUSE=EMP=DUB

"He never said goodbye to the others, went without even
a word. Didn’t talk to us. He might be wild at us over
something (but I don’t know what)."

3.8.1.10 Interrogative =nta

This clitic occurs in polar interrogative sentences and in some
sense marks that a question is being put to the addressee. It more
commonly occurs as a mark of disjunction, where the addressee is being
asked to choose one of a set of objects (see 236 below). The clitic can
be added to any part of speech. In 234 and 235b the clitic appears on a
verb. In 235a and 236 it appears on nominals. In all the examples so far
collected, excluding those like 236 in which it marks disjunction, =nta
occurs on the first word of the NP.

234. thanarru! ngunyji-∓=rla kapi-yu mana-nha=nta?
hello there-NOM=FORE fish-ACC get -PST=INT

"Hello! Has that mob down there got any
fish yet (or not)?"
"Did you get all (or not) of the horses?"

"Did you get (or not) all the horses?"

"You want something, grog or water?"

Only two examples of this clitic have been found to date and it is impossible to clearly characterize it on the basis of such meager data. The two examples are given below. The idea of recognition seems to fit these examples and I have used this as a label for the time being.

"Oh! so it's meat there that that woman who just sat down is turning over."
"So this is the man who hit you! I'll spear that fella."

3.6.1.12 Foregrounding =rla

At present it is not clear what the function of this clitic is. It is by far the most commonly occurring clitic appearing at least once in almost every utterance. It is clear that =rla has some foregrounding function in discourse. Almost all new participants are marked with this clitic when they first appear, as are new and unexpected events (denoted by verbs). There appears to be no restriction on the number of times this clitic can occur in any clause. I think a clear characterization of =rla will require a more thorough analysis of Panyjima discourse structure and topicalization strategies than can possibly be attempted here. Examples of =rla can be found throughout the thesis.

3.6.1.13 Tense Axis Shift =layi

This clitic serves the important discourse function of moving the axis upon which the tense of verbs is reckoned. That is, each occurrence of this clitic advances the tense reference point further along in the sequence of events described in the discourse. Typically, it occurs on a verb marked with perfect aspect inflection, thus indicating that the narrative is moving on from the action denoted by the verb having been completed, or on a nominal inflected for locative case, indicating that the participants are situated at, and the events of the narrative are now taking place at, the location specified by the narrative. Programmatic narratives and travel narratives make great use of these devices. For example, consider the programmatic text below.
239. Having killed the echidna, you cut out the two lumps from its throat. Having cut them out, you throw it on the fire so that you can chisel it. While you're chiselling the porcupine, scraping it to get the spines off, you grunt. Having chiselled it, you pull out the guts. Having pulled out the guts, you put in some hot cooking stones. Having put the hot stones in the guts, you throw it in the hot ashes. Now that it is lying, having been put in the ashes, you don't drink any water, you
wait while it's cooking. Once the echidna has cooked, now you can drink water."

3.8.2 Order of the Non-restricted Clitics

A number of examples in the corpus give clues as to the sequence of clitics on the word. At present it is not possible to be sure of the co-occurrence restrictions on the addition of clitics. The table below, which gives the order of the clitics, may predict sequences of clitics which are not in fact admissible.

Table 18 Order of non-restricted clitics

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>=kanu</td>
<td>=rru</td>
<td>=kumpa</td>
<td>=rra</td>
<td>=nyu</td>
<td>=ra</td>
<td>=layi</td>
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<td>=nhanu</td>
<td>=mu</td>
<td>=mam</td>
<td>=mam</td>
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<td>=ntn</td>
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<td></td>
<td></td>
<td>=warlaru</td>
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</tr>
</tbody>
</table>
It may be possible to establish a number of categories of clitics. The two clitics in position A could be characterized as contrastive. They compare or contrast the referent of the word to which they are attached with other words in the utterance. The two clitics =rru and =mu in position B are complementary and refer to particular, identified points in time. The clitics in positions C, D and E all involve speech act related assumptions about the referential material of the clause. They convey something about the speaker's knowledge of the events and participants in the clause, and something of the speaker's assumptions about the addressee's knowledge of the events and participants in the clause. The clitic =layi in position G operates on the discourse level and is largely a discourse structuring device. Although the exact role of the clitic =rla (position F) is yet unknown, it too appears to operate on a discourse level.

Thus we have three broad classes of clitics. The first, positions A and B, is quite closely tied to the actual participants, and the spatial and temporal location of the participants and events, in the utterance. The clitics of the second class, positions C, D and E, involve speech act related assumptions about the information coded in the utterance. The third class includes clitics which have an organizational function in the utterance itself.

At this stage it is not clear how the clitics =nta, =warni and =warlaru fit into this schema.

3.8.3 Verbal Clitics

There are three clitics in Panyjima which can only be added to a verb. These are mutually exclusive and follow the tense inflection of the verb and preceding any non-restricted clitics which may occur. Two of the clitics are pronominal while the third marks the verb on which it occurs as reflexive. Each is described in turn below.

3.8.3.1 Pronominal Clitics

1st Singular Object =rni

This clitic occurs marking that the patient, goal or recipient of the verb is the speaker. Two examples are:
240. thaa-ma=rni =rru yana-rt.a muthumuthu-la=mu.
   let-IMP=1sg=NOW go -FUT cool -LOC=THEN

   "Let me go now while its cool!"

241. mantu-0 yinya-=ma=rni!
   meat-NOM give-IMP=1sgO

   "Give me meat!"

1st Singular Benefactive =ju

This clitic marks that the verb action is to be performed for the benefit of the speaker. For example:

242. panha-0 kati-ma =ju papa -0 partarra-la.
   that-NOM take-IMP=1sgBEN water-NOM bowl -LOC

   "Bring water in a bark bowl for me!"

243. panha-0 warlparra -y  mana-ma =ju!
   that-NOM spearthrower-NOM get-IMP=1sgBEN

   "Get me that spearthrower!"

244. jikanpa-0 ngarra-ma =ju karlpa-rt.a-ku ngunha-yu
   step-NOM chop=IMP=1sgBEN go up-FUT-ACC that-ACC
   jantaru-ku ngarra-larta-ku.
   honey -ACC chop -FUT-ACC

   "Chop a ladder for me to go up and chop that honey."

It appears that the two clitics occur only on verbs in imperative mood (and may not occur with a free pronoun with the same reference in the same clause). Notice also that both refer to the speaker and that no other pronominal clitics occur in the language. This suggests that the use of these (borrowed) clitics is a recent innovation.
The two pronominal clitics have clear cognates in languages to the east of Panyjima. For example, the Western Desert dialect Mantjiltjara (Marsh 1976) has a full set of pronominal clitics. In this language rni is the first person singular 'direct object' and =ju (=tju) is the first person singular 'indirect object' glossed as "to me" or "mine". We have seen that Panyjima makes no morphological distinction between so called 'direct' and 'indirect' objects. The use of the Panyjima clitic rni bears this out. Benefactive in Panyjima is usually marked with the genitive case marking suffix which also indicates possession. In Mantjiltjara the clitic =ju indicates first person singular possession as well as indirect object status, and this may be the basis upon which it has been analyzed in Panyjima. Notice, however, that in example 244 above, =ju marks the subject of the subordinate clause which appears with accusative case marking. To some extent then, =ju has not altogether given up its 'indirect object' status.

6.3.2 Reflexive =pula

Some examples of the use of the reflexive are:

245. winningki-ku karta-ma=pula yinya-rtal
    blood -ACC poke -IMP=REFL give -FUT
    "Poke yourself to give blood (as a medicinal)!

246. yana-rtal thana pukanypa-D mana-rtal
    go -FUT 3sgNOM hunting-NOM get-FUT
    miyirma-larta=pula minarli-ku mantu-yu.
    provide-FUT =REFL own -ACC meat-ACC
    "He's going hunting to get his own meat,
    to provide for himself."

247. ngunha-jirri-D kutu-ma-larta=pula kari-yu ngarna-ku.
    that-PLURAL-NOM dead-CAUS-FUT=REFL grog-ACC eat -PRS
    "They'll kill themselves drinking grog."
The clitic -pula is the only mark of the reflexive in Panyjima and reflexives must be marked with this clitic. The form /pula/ occurs elsewhere in Panyjima as a nominal derivational suffix meaning "both" (see section 3.2.2 above). -pula is common throughout Australia as a dual pronoun clitic on verbs. The notion of dual is perhaps not so difficult to reconcile with the notion of reflexive. To put it a little simplistically, the subject of a reflexive verb is generally "both" the subject and the object of that verb.
FOOTNOTES

1. The Ngayarda subgroup, by O'Grady (1966), includes the following languages: Palyku, Panyjima, Ngarla, Ngarmum-Kariyarra, Nhuwala, Nyamal, Yanyijparnti-Kurrama and Martuthunira. O'Grady classifies Panyjima and Palyku as dialects of the one language. Instead I would argue that Palyku is not in fact a dialect of Panyjima and is perhaps not a member of the Ngayarda subgroup.

2. The term affinal could not be used were we to consider female kinsmen.

3. The use of the feature [+-disharmonic] rather than [+-harmonic] was suggested by John Haviland. Notice that by using this feature the most marked avoidance relationship will have a plus value for both the [+-affinal] and [+-disharmonic] features.

4. For further discussion of the range of behaviour possible between certain kin see Tonkinson (1978:47-48).

5. I am using a practical orthography following Dixon and Blake (1979) and Dixon (1980). The consonants are unitary phonemes even where written with digraphs. The following spelling conventions are used:

   The apico-dental homorganic nasal/stop cluster is written as /rnt/ rather than as /rnt/. 

   The lamino-dental homorganic nasal/stop cluster is written as /nth/ rather than as /nhth/.

The orthography used here is identical with that used by Austin (1980a and e) in describing the Kanwarra and Mantharta languages, and by Simpson (1980) in describing Ngarmum. Wordick (1979) uses a slightly different orthography in his description of
Yinyjiparnti. He uses the symbol /ty/ for the lamino-palatal stop where I use /j/, and /ll/ for the lamino-palatal lateral where I use /ly/. The spelling conventions for the homorganic nasal/stop clusters cannot be used in Yinyjiparnti since the clusters /rnt/ and /nth/ apparently do contrast with /rnrt/ and /nth/ in this language. Yinyjiparnti also appears to allow the sequence alveolar lateral followed by the glide /y/. It is for this reason that Wordick chooses to use /ll/ for the lamino-palatal lateral.

6. This analysis of the history of Yinyjiparnti murrirni is from Wordick's (1979) grammar.

7. The examples are by no means exhaustive but are intended just as illustration. The plural terms are again formed by adding the suffix -ngara to the dual forms.

8. Figure 2. is not the only order of the two features with respect to the addressee/addressee and speaker/addressee parameters which will produce the required result. We should not, therefore, ascribe too much importance to this ordering. However, the system does suggest that the major distinctions are made on the basis of the relationship between the addressees, the addressees' relationships to the speaker being secondary.

9. The allomorphic variation of the suffix in the various languages suggests a chain of historical development. The original allomorphy may have been identical to that now existing in the Western Desert.

* -karra / C_
* -orrara / V_
The *-arra allomorph may then have changed as follows:

\[
\begin{align*}
* -arra / v_\_ & \rightarrow -arra / a_\_ \\
(\text{aa} > a) & \quad \text{Pn, Ny} \\
& \rightarrow -warra / u_\_ \quad \text{Pn} \\
& \rightarrow -yarra / i_\_ \quad \text{Pn, *Ny} \\
& \rightarrow -yarra \rightarrow -yirri \quad \text{Ny}
\end{align*}
\]

10. As in section 3.3 the analysis is worked out only for a male speaker, male addressees, and other male referents. Unfortunately, my informants (male) were not comfortable with hypothetical cases involving females and soon became frustrated that they had lost their intuitions.

11. O'Grady, Voegelin and Voegelin (1966) give a plural 2nd person form nyinkupanthurri for the marntiyarra relation, but none of my informants recognized the form. I have not yet checked O'Grady's notes and so have not traced his informant.

12. Given that the third person pronoun only occurs where the referent has previously been identified in the discourse, number marking on the pronoun is needed only to unambiguously identify which of the previously mentioned participants is being referred to. In most instances, case marking will carry much of the weight of disambiguation and so, to an extent, number marking is redundant. Though this might explain the reanalysis of thana as a singular, it does not explain why the language bothered to create a new dual form.

13. The form ngunhanhmu in the following example may be another example of the old anaphoric derivational affix.

ngatha kampa-lartanguru pirri -ngka=nu mantu-yu, 
1sgNOM cook -CONTRAFAC afternoon-LOC=THEN meat-ACC
nyiya-ŋ kuwarri-la puka -yi -nha=r=ru mant-ŋ. ngatha
this-NOM now -LOC rotten-INCH-PST=NOW meat-NOM 'sgNOM
wiya-lartanguru puka -yi -jara -'yu manu=yu
see -CONTRAFACT rotten-INCH-MIGHT-ACC meat-ACC
gunhanmu-la.
that time-LOC

"I should have cooked the meat in the afternoon. 'T's gone
rotten now. I should have seen that the meat would go off
at that time."

Here we have anaphoric reference to a previously established
point in time. The old anaphoric derivational suffix -j- (in
this case -n- since it precedes a nasal) is followed by what is
most likely, historically, the temporal clitic -mu (see section
3.8.1.4 and footnote 18).

14. O'Grady was not quite correct in a number of details. He gives
the forms yarna-ŋ "to go" and marna-ŋ "to get" for Panyjima. It
may be that it is necessary to rework his reconstruction
yielding the past tense form -na for the *N-conjugation.

15. The same suffix exists in Yinyjiparnti where Wordick (1979)
describes it as a factitive verbalizer with the sense "stick:
out, pull off". He gives the following examples:

mutya-wi-N            "to stick one's nose out"
nose -P:-
partu-wi-N            "to pluck"
feather-P:-
wantya-wi-N           "to take off, pull off, detach"

These examples certainly fit the characterization of the suffix
as 'processive' or 'iterative'.
16. It is interesting to consider the possible history of the -pi-suffix. One of my informants once remarked that the -pi- verbs all meant "going along doing...". While this is clear enough for verbs such as parntarapi-L "to go along leaving a bent footed track", wilkapi-L "to go through a gap in the hills", and tharlurapi-L "clouds to roll across the sky", it does not account for the majority of -pi- verbs. However, one is tempted to look for a cognate verb of motion which may have become fixed as a derivational suffix.

17. It may or may not be significant that Panyjima does not appear to allow conjoined NP subjects of reciprocal verbs. Actually it is difficult to imagine a situation in which the individuals comprising the non-singular subject of a reciprocal could not be referred to by way of a pronoun, demonstrative, kinterm, or number inflected nominal.

18. The clitic =mu also occurs in Yinyjiparnti where Wordick (1979) describes it as "Anaphoric". He suggests that it means "previously mentioned" or "basically 'back'". It also occurs in situations where it means 'past' and "in a temporal domain =mu essentially means 'before'". We have seen that in Panyjima =mu very often refers to past events and, in that it refers to established points in time, it could be considered anaphoric. Wordick also suggests that the =mu clitic "has the ability to change its orientation by °80" and is the only clitic which can follow itself". By the "°80" I assume Wordick means that =mu can be used cataphorically (?) or to refer to future events. If so Yinyjiparnti =mu looks more and more like the Panyjima clitic. I think the suggestion that =mu can follow itself is based on the analysis of certain temporal nominals such as:

ngartimu "again" ( = Panyjima ngartimamu )
warrungkamu "tomorrow" ( = Panyjima )

While it is clear that the clitic =mu was involved in the history of these nominals the clitic has become fossilized. Example 211 (in text) gives an example of the nominal
warrungkamu followed by the ablative suffix and then followed by the clitic =mu.

19. In this sentence the speaker is trying to reassure the addressees though still wanting to make the point that they have killed someone. The speaker not only hedges around using the verb "to kill", but also uses a reciprocal form of the Pro-verb implying that the person now was not entirely innocent of the act leading up to his death.
APPENDIX: NOMINATIVE CASE MARKING IN PASSIVE AND IMPERATIVE CLAUSES

At various points in preceding chapters mention has been made of the facts of passivization of ditransitive verb stems. It has been noted that only one of the two accusative marked NP arguments of the active verb can appear as the nominative NP argument of a passive verb (whether derived by the -(n)guli- suffix or inflected with one of the two passive inflections). The examples below illustrate this for the verbs yinya-0 "to give" and mirnuma-1 "to teach, show".

1a ngetha yukurru-ku mantu-yu yinya-nha.
   1sgNOM dog -ACC meat-ACC give -PST
   "I gave the dog meat."

1b yukurru-Ø yinya-nguli-nha mantu-yu ngathalu.
   dog -NOM give -PASS -PST meat-ACC 1sgINST
   "The dog was given meat by me."

1c * mantu-Ø yinya-nguli-nha yukurru-ku ngathalu.
   meat-NOM give-PASS -PST dog -ACC 1sgINST
   "The meat was given to the dog by me."

2a ngaliya warlipi-kutha-ku mirnu-ma-rna parnka-yu.
   1dl(exc)NOM boy -DUAL-ACC know-CAUS-PST lizard-ACC
   "We two showed the two boys the lizard."

2b ngaliyalu parnka-yu warlipi-kutha-Ø
   1dl(exc)INST lizard-ACC boy -DUAL-NOM
   mirnu-ma-unguli-nha.
   know-CAUS-PASS -PST
   "The two boys were shown the lizard by us two."
"The lizard was shown to the two boys by us two."

It is clear that where the verb has three arguments only the recipient or goal can appear as the nominative case (unmarked) subject of the passive verb. The patient can never be the subject of a passive ditransitive verb. This is not true of course of two place verbs. As examples 3 and 4 show, patients as well as recipients or goals can appear as the nominative argument of a two place passive verb (Fn 1).

Goal:

3a. ngunha-ŋ marlpa-ŋ ngaju mirra -nha.
that-NOM mar. -NOM 1sgACC sing out to-PST

"That man sang out to me."

3b. ngatha mirra -nguli-nha ngunha-ngku marlpa-ngku.
1sgNOM sing out-PASS -PST that -INST man -INST

"I was sung out to by that man."

Patient:

4a. ngunha-ŋ parnka-ŋ mantu-yu ngarna-nga. 
that-NOM lizard-NOM meat-ACC eat -FUT

"That lizard will eat the meat."

4b. mantu-ŋ ngarna-nguli-nga ngunha-ngku parnka-ku. 
meat-NOM eat -PASS -FUT that -INST lizard-INST

"The meat will get eaten by that lizard."

As noted in earlier sections, the normally accusative marked
argument of a two-place verb appears in nominative case when the verb is inflected for imperative or hortative mood. Where the verb is ditransitive, it is again only the goal or recipient which can (and must) occur in nominative case. (However, where the goal or recipient NP is a pronoun the accusative form of the pronoun must occur.)

5a. nyinta yinya-ma marlpa-ŋ mantu-yu!
   2sgNOM give-IMP man -NOM meat-ACC
   "Give that man some meat!"

5b. *nyinta yinya-ma mantu-ŋ marlpa-yu!
   2sgNOM give-IMP meat-NOM man -ACC
   "Give that man some meat."

8. mirnu-ma-nma yukurr.-ŋ panha-ŋ ngunha-yu marlpa-yu,
   know-CAUS-IMP dog-NOM that-NOM that -ACC man -ACC
   mirnu-ŋ =mu panti-rta ngunha-ngka marlpa-ngka.
   know-NOM-THEN sit -FUT that -LOC man -LOC
   "Show that man to the dog, he'll know to stay
   with that man then."

It is clear that we cannot explain the preferential treatment of some NP's in passive clauses and imperative and hortative sentences in terms of case marking. It is unlikely that an appeal to direct versus indirect object will explain anything either since the two cannot be defined independently of this preferential treatment. The definition of direct and indirect object on these grounds would not, in any case, be particularly satisfying. If we decide that direct objects are those which can be "promoted" to nominative status, we would have a situation in which only the few ditransitive verbs would have indirect objects and these would be semantically closest to the "direct objects" of the transitive verbs. Hooper and Thompson (1980) suggest that in many respects,
the arguments known to grammars as INDIRECT OBJECTS should in fact be transitive O's rather than what might be called 'accusative' O's, since they tend to be definite and animate."

Hooper and Thompson (1980:259)

They cite a number of examples of languages in which the so-called indirect object wins out over the direct object by virtue of its human and definite status. The preferential treatment of indirect objects certainly appears to operate in Panyjima if we assume that the 'promoted' NP's are instead indirect objects. However, there is still no independent criterion on which to define the two types of object.

Examples like 7 above show that it is difficult to appeal to a hierarchy of inherent topicality in attempting to explain the 'promotion' of NP's. In this example the 'promoted' NP, the goal, is yukurru-0 "dog", while the 'non-promoted' patient NP is maripa-yu "man". Although the definite human NP is higher on the hierarchy of inherent topicality, it cannot be 'promoted' into nominative position in this example.

It appears that in order to explain the case marking in imperative and passive sentences, we have to make reference to the semantic roles of the of the NP arguments and establish a hierarchy of accessibility to nominative case, or unmarked, as was (Fn. 1). Clearly recipient and goal are higher than patient in this hierarchy. In the case of a two place verb, the accusative argument of the active non-imperative verb is either a patient or a goal or recipient. Thus, this argument will always appear in nominative case with passive and imperative verbs. For ditransitive verbs we would need to assume that both non-subject arguments were always present at some level (though one or other need not occur on the surface) so that patient could never occur in nominative case with passive verbs.

There is, however, one example in the corpus in which the patient of a ditransitive appears in nominative case. The example is:

9. mantu-9 yinya-na =rn11
meat -NOM give -IMP=1sgO

"Give me meat!"
Notice that in this example the recipient, the speaker, is marked with a pronominal clitic (see section 3.8.3.1 in text). This clitic is used to mark the speaker as the undergoer of the action and the speaker can be patient, goal or recipient. To explain we need to make the following assumptions. Firstly, the verb "give" is more likely to have a human recipient than a human patient so that we can read the clitic as referencing the recipient, not the patient. By marking the recipient by way of a clitic, it is then presumably removed from the hierarchy (the independent pronoun cannot co-occur with the pronoun clitic) and so the patient NP appears in nominative case. One example is too small a sample on which to base an analysis. More data is needed before the analysis can be expanded.

A promotional/demotional analysis, following Relational Grammar, could easily be constructed for the Panyjima passive. The agent would be demoted to Chomeur status (marked by instrumental case), and then the next argument in the hierarchy would be promoted into subject position. There are some difficulties applying such an analysis to imperatives and hortatives. Although an accusative NP, either the recipient, goal or patient (the next after agent in the hierarchy), is moved into nominative case, we would not want to call this the subject of the clause, especially since the agent (subject) can freely appear also. Further, we would need to block the promotion of pronominal goals, recipients and patients by some device.

If the nominative goal, recipient or patient in imperatives and hortatives is not the subject, why does it occur in nominative case? I would argue that it is rather unmarked than marked by any zero morpheme. Imperatives and hortatives are restricted in the subjects they allow. The subject of an imperative is obligatorily second person, that is the addressee or addressees. The subject of the hortative is obligatorily non-singular first person. Since the subject of an imperative or hortative verb is implied by the mood of the verb, the NP marking that subject can be freely deleted. The subject restrictions on imperative and hortative verbs also imply that any NP in the clause not fitting these restrictions must be an object, non-subject, of the verb. Presumably then, this non-subject need not be marked as a non-subject. How do we explain the fact that pronouns are marked as non-subjects? First and second person pronouns occupy the highest position in the Silversteinian hierarchy of inherent topicality. Where these pronouns
occur in nominative case they will be assumed to be the subject of the clause since this is the most topical syntactic position. To avoid this interpretation they must be marked accusative.

Footnote:

1. We will still need to define these semantic roles independently of the syntactic facts we are attempting to describe. I am using the following definitions of goal, recipient and patient:

Goal: the entity towards which actions, perceptions or intentional mental states are directed.

Recipient: the point of termination of transfer, typically human.

Patient: the participant which undergoes a state or location, or undergoes a change in state or location.
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