Chapter 6: Tense, aspect and mood

The various tense, aspect and mood (TAM) categories in Enindhilyakwa are expressed by a combination of prefixes and suffixes on the verb: the pronominal prefixes encode mood and the inflectional suffixes express tense and aspect. There are two tenses (non-past and past), and two aspectual readings (neutral aspect and a subtype of perfective aspect which signals atomic events).

Each inflectional suffix simultaneously encodes both tense and aspect, which gives rise to four different tense/aspect categories: atomic non-past (NP1), neutral non-past (NP2), atomic past (P1) and neutral past (P2). These are used in positive polarity contexts. Negative polarity distinguishes negated non-past (represented by a distinct NP3 suffix) from negated past (conveyed by an irrealis prefix plus a P2 suffix).

The tense/aspect suffixes combine with the four pronominal prefix series discussed in Chapter 4, which distinguish an equal number of moods: realis, irrealis, imperative and hortative. This yields a system of composite mood marking typical of the non-Pama-Nyungan languages (Verstraete 2005), where prefixes and suffixes are combined to mark a variety of modal meanings. The majority of non-Pama-Nyungan languages discussed in Verstraete (2005) have a basic distinction between three broad categories of prefixes, including “realis” (non-modal), “irrealis” (modal) and “other” (e.g. future, or imperative) (p. 228-9). Enindhilyakwa is rather unusual in displaying a fourth, formally distinct, hortative category.

The atomic event markers signal non-scalar, instantaneous changes-of-state that have no internal subparts (Caudal 1999). Atomic events are often signalled by phonologically null suffix. The following examples illustrate the distinct aspectual readings: a realis prefix is combined with an unsuffixed verb stem signalling atomic past (P1) in (1a), and with an overt neutral past suffix P2 in (1b). In (2a) an irrealis prefix is combined with an unsuffixed verb stem signalling atomic non-past (NP1), and in (2b) with a neutral non-past suffix (NP2). The negated past is illustrated in (3a), and the negated non-past, using the specific NP3 suffix, in (3b).

(1) a. akina akwalya na-jungu-ma
NEUT.that NEUT.fish NEUT-die.P1-ma
‘the fish died’

b. akina akwalya na-jungu-nv-ma
NEUT.that NEUT.fish NEUT-die-P2-ma
‘the fish was dying’

(2) a. dhukwa kv-mydhilyakba
maybe IRR.1-cough.NP1
‘I might cough (one cough)’

b. dhukwa kv-mydhv-mydhilyakbv-na
maybe IRR.1-RDP-cough-NP2
‘I might cough (many coughs)’

(3a) [example] (anin2_pw_au_004)

(3b) [example] (anin2_pw_au_004)
The verbs that signal atomic aspect express instantaneous ‘point’ events that cannot be interrupted and then resumed (Caudal 2005a). The atomic events are realised by phonologically null suffixes in these examples, but in some conjugation classes (see Table 6.2) they are marked by the phonologically overt suffix -ya, as in *k-engkvrryki-ya* [IRR.1-hear-NP1] in (5b) below. These atomic events contrast with verbs marked with an aspectually neutral tense suffix, which have no such implication.

Cross-cutting the TAM system, we find the very common suffix -ma, and its less common variant -mvrra, which directly follow the tense/aspect inflections, as in (1). This suffix is analysed as a ‘first person focalisation’ marker, which entails that the speaker or narrator expresses his or her perception of an event or state of affairs. Thus a more accurate gloss of (1a) would be “I saw/thought/am of the opinion that the fish died”. The suffix is glossed as -ma in this thesis, for reasons outlined in section 6.7.

Both the Enindhilyakwa TAM system and the -ma ~ -mvrra suffix have received wildly differing analyses in the previous work. Only Heath (n.d.) observes an aspectual distinction in the tense suffixes, which he labels ‘Punctual’ and ‘Continuous’ aspect (similar to how he analyses the inflectional suffixes in Wubuy in Heath 1984). By contrast, Reid, Stokes & Waddy (1983), Leeding (1989) and Waddy (n.d.-a) assume that these suffixes encode only tense, not aspect. Reid, Stokes & Waddy (1983) and Waddy (n.d.-a) do not discuss aspect, and in the stories collected by Judith Stokes and Judie Waddy (which constitute a major source of my data), the phonologically null NP1 and P1 suffixes are often glossed as ‘Unidentified Verbal Suffix’. Leeding (1989), on the other hand, claims that all tense suffixes are optional (p.437). She argues that aspect is represented by the -ma ~ -mvrra suffix, which encodes both imperfective aspect and tense. The suffix has two more variants in her analysis: -ama ~ amvrra denotes non-past imperfective, while -ma ~ -mvrra denotes past imperfective. Thus in Leeding’s account tense may be marked twice: by the ‘regular’ tense suffixes and by the ‘imperfective’ suffix. As both of these are optional, tense and aspect can also remain unmarked. According to Leeding perfective aspect is identified by the absence of a suffix (1989: 441). This means that the lack of a suffix in her analysis is ambiguous between perfective aspect, and any tense/aspect due to omission of the suffix.

Whereas Leeding takes the -ma ~ mvrra suffix to be a marker of imperfective aspect, Heath (n.d.) suggests it to be meaningless. Stokes (1982), Reid, Stokes & Waddy (1983) and Waddy
(n.d.-a) propose this suffix is a “marker of a fact”. However, these analyses cannot account for simple sentences such as the following.

(4) a. kv-lharrv-ma
    IRR.2-fall.NP1-ma
    ‘you will fall’ (JH Tape 68 p.3)

b. arnungkwaya kvnv-lharrv-n(-ma)
    tomorrow IRR.MASC-fall-NP2(-ma)
    ‘tomorrow it will rain’ (Lit: ‘it [velyukwa ‘MASC.rain’] will be falling’) (anin4_dl_au_005)

In Leeding’s account, the -ma suffix in (4a) would denote past imperfective, but this example is neither past, nor imperfective.¹ In the Reid, Stokes & Waddy (1983) and Waddy (n.d.-a) analyses the -lharr- stem in (4a) (the v [a] following the stem is taken to be epenthetic; rule P-1) would involve an ‘Unidentified Verbal Suffix’. The -ma suffix in (4a,b) would denote a “statement of a fact”, but it is unclear how this suffix is compatible with an irrealis prefix expressing a hypothetical event in the future. Reid, Stokes & Waddy (1983) state that the -ma suffix only occurs in the past tense, but this is clearly not the case, as can be seen in both examples in (4).

This chapter attempts to resolve these controversies, by arguing that: (i) the inflectional suffixes encode both tense and aspect (following Heath n.d.); and (ii) the -ma ~ -mvrra suffix is unrelated to tense and aspect, but is used when the speaker expresses his or her perception of an event (and is consequently very common in elicited sentences). The unsuffixed NP1 stem in (4a) expresses an instantaneous (atomic) falling event without any subparts, which may be predicted or witnessed by the speaker, as conveyed by -ma. The -ma suffix contributes a meaning along the lines of ‘I say/think/feel/…’. The NP2 suffix in (4b) has no aspectual restrictions, and the optionality of the -ma suffix means that the possibility of rain tomorrow can be expressed as an objective statement of a fact, or as a speaker’s opinion or perception.

6.1 Organisation of chapter
This chapter is structured as follows. Section 6.2 explains the Enindhilyakwa TAM system in more detail, while section 6.3 outlines the tense/aspect paradigms of the six main inflectional classes and their subclasses. The classes are numbered one to six and are identified by their unique combination of NP2 and P2 suffixes. Section 6.4 lists some stems that show class alternations accompanied by a change in transitivity. The semantics of aspect is examined in section 6.5. Composite mood marking, by combining the suffixes with the four different pronominal series, is investigated in section 6.6. Section 6.7 then turns to the meaning and function of the elusive -ma ~

¹ In Leeding’s analysis, this example would lack a tense suffix. And (4b) would involve the non-past imperfective suffix -ama in her account, so she would put the morpheme boundaries as follows: kvnv-lharrv-n-ama.
-mvrra suffix. Possible historical sources for this suffix are suggested in section 6.7.2. Section 6.8 finishes this chapter with a summary.

6.2 The tense, aspect and mood system

Table 6.1 presents the possible combinations of verbal inflectional categories in Enindhilyakwa, where mood is represented by prefixes and tense and aspect by suffixes. Unlike most Gunwinyguan languages (Alpher, Evans & Harvey 2003), but in common with Wubuy (Heath 1984), tense and aspect are not confined to the realis mood, but appear in all four positive moods, with some neutralisations. Negative contexts involve the negative particle nara. In the negated non-past the pronominal prefixes are replaced by a- or ng-, and this category takes a distinct NP3 suffix. The numbers ‘1’ and ‘2’ designate atomic and neutral aspect, respectively.

<table>
<thead>
<tr>
<th></th>
<th>Past</th>
<th>Non-past</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positive</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Realis</td>
<td>Realis Past1</td>
<td>Realis Past1</td>
</tr>
<tr>
<td></td>
<td>Irrealis Past2</td>
<td>Irrealis Past2</td>
</tr>
<tr>
<td>Realis</td>
<td>Realis Past2</td>
<td>Realis Past2</td>
</tr>
<tr>
<td><strong>Neg.</strong></td>
<td>nara</td>
<td>a- / ng-</td>
</tr>
<tr>
<td>Irrealis</td>
<td></td>
<td>NP3</td>
</tr>
<tr>
<td>Past2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6.1: Enindhilyakwa tense, aspect and mood inflectional categories

Thus, the various TAM categories are expressed formally by complex combinations of (i) inflectional suffixes (see paradigms in the next section); (ii) choice of four series of pronominal prefixes expressing mood (see paradigms in Chapter 4); and (iii) presence or absence of the Negative element nara, which always precedes the verb.

The following examples illustrate some of the TAM combinations in Table 6.1. Realis mood is unmarked in the glosses, while Irrealis, Imperative and Hortative are glossed IRR, IMP and HORT, respectively.

(5) a. Realis + p1 and p2:

\[
\text{Nnya-engkvrtrvka arakba nuy-akadha-ngv-ma amarda.}
\]

1-hear.p1 compl.act NEUT-make.own.sound-p2-ma NEUT.grass

'I heard the grass crackling.'

('Bujikeda’ y16)

b. Irrealis + NP2 and NP1

\[
\text{biya kvnu-wardu-wardemi-na n-akina, nganja k-engkvrrvki-ya kemba=dha}
\]

and IRR.3m-RDP-cry.out-NP2 3m-that I.PRO.CofR IRR.1-hear-NP1 then=TRM

'he will keep on crying out, and then I will hear [him]'

('Yabungurra’ l8-9)
c. Irrealis + p2

\[
dh-akvna\ kvnga-ma-ngv-mrrra\ kembirra\ arakba\ ki-yengbi-ny-ma\ ngayuwa
\]
3f-that IRR.1/3f-take-p2-ma then compl.act IRR.1-speak-p2-ma 1.PRO
‘had I married her, then I could have spoken to her’

(‘Old days’ f13)

d. Imperative + NP1

\[
Yelhakwa\ ma-ngwanja-ji-ya-lhangwa=yi!
at.here\ IMP.2/VEG-stop-CAUS-NP1-ABL=EXCL
‘Stop [the car(VEG)] here please!’

(‘Search’ z82)

e. Hortative + NP2

\[
Yawu\ kwa\ env-lhvka-ja\ kajungwa\ kvnv-rvvngkv-ni=yadh\ yilyakwa
yes\ here\ HORT.3m-go-NP2\ so.that\ 3m/MASC-see-p2=PURP\ MASC.honey
‘Yes, let him come so that he can see the honey.’

(VL1 p.487)

f. Negated irrealis + p2

\[
akena\ nara\ kabv-mvn-arndvrra-nga
but\ NEG\ IRR.3pl/1sg-BENE-disapprove-p2
‘but they didn’t criticise me’

(‘A trip south’ a101)

g. Negated non-past

\[
Nara\ arndaka-ngvma\ nvng-en\ akwalyu-wa\ arnungkwaya.
NEG\ NEGNP.spear.fish-NP3\ 1-this\ NEUT.fish-ALL\ tomorrow
‘I am not fishing here tomorrow.’

(VL1 p. 439)

A realis prefix combined with a past suffix gives a non-modal ‘statement of a fact’, which can be instantaneous, as signalled by the p1 suffix in (5a), or aspectually neutral, as signalled by the p2 suffix in (5a). An irreals prefix combined with a non-past tense suffix may express non-modal ‘future’, which can also be either aspectually neutral or signal an instantaneous event, as in (5b). The irrealis prefix combined with a past suffix in (5c) expresses a ‘counterfactual’, i.e. an event that could have happened in the past but did not. The imperative in (5d) takes a distinct prefix and a NP1 suffix. Hortative is another mood distinguished in the prefixes, which in (5e) takes a NP2 suffix. The negated past is expressed by an irrealis prefix and a p2 suffix in (5f). The example in (5g) illustrates the negated non-past, where the pronominal prefixes are replaced by a- or ng- and the verb takes the NP3 suffix -ngvma. The NEGNP prefix in this example is a-, which merges with the stem-initial /a/ vowel according to the rule proposed in (84) in section 2.6.3.

6.3 Tense and aspect paradigms

Six main inflectional classes or conjugations can be distinguished on the basis of the forms of the aspectually neutral NP2 and p2 suffixes. There is no semantic or valency basis underlying the different classes (except for perhaps class 6, which mainly includes intransitive stance verbs - see section 6.3.6). The NP2 and p2 suffixes are the most variable and thus most diagnostically useful. Each conjugation is defined by a unique pair of NP2 and p2 suffixes. Most conjugations can be
further subdivided, based on the quality of the stem-final vowel, amongst other factors. Table 6.2 presents the paradigms of the six main conjugations.²

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP1</td>
<td>-Ø</td>
<td>-ya</td>
<td>-ya</td>
<td>-Ø</td>
<td>-ya</td>
<td>-nga-Ø ~ -ya</td>
</tr>
<tr>
<td>NP2</td>
<td>-na / -rna</td>
<td>-na</td>
<td>-ja</td>
<td>-na</td>
<td>-na</td>
<td>-Ø ~ -na</td>
</tr>
<tr>
<td>NP3</td>
<td>-ma (?- -ngvma)</td>
<td>-ma</td>
<td>-ma ~ -ngvma</td>
<td>-ma ~ -ngvma</td>
<td>-ma</td>
<td>-ma ~ -ngvma</td>
</tr>
<tr>
<td>P1</td>
<td>-Ø</td>
<td>-Ø ~ -nga</td>
<td>-Ø</td>
<td>-Ø</td>
<td>-Ø</td>
<td>-nga-Ø</td>
</tr>
<tr>
<td>P2</td>
<td>-rnv / -nv</td>
<td>-ngv</td>
<td>-rnv ~ -nv</td>
<td>-Ø</td>
<td>-wa</td>
<td>-Ø ~ -nv</td>
</tr>
</tbody>
</table>

Table 6.2: Basic paradigms of tense/aspect inflections, organised by conjugation class

The NP1, NP3 and P1 categories are often formally identical across the different conjugations, such as NP1 -ya, NP3 -ma and P1 -Ø. The P2 category varies most; when the P2 categories of two conjugations are represented by identical suffixes, as in conjugations 1 and 3, the conjugations are distinguished by their NP2 categories. In common with the Gunwinyguan languages (Baker 2004), the NP2 suffix in Enindhilyakwa typically involves an apico-alveolar nasal (an exception being conjugation 3 - but see section 9.3.4.3 for a diachronic analysis where this category does involve a nasal). Conjugation 6 (stance verbs) is a highly distinct class that has an allomorph -Ø in all positive categories (i.e. all but NP3, the negated non-past). The NP1 and P1 stems, however, are distinct due to the augment -nga- that precedes the tense/aspect inflection, which is absent in the NP2 and P2, as shown in the Table (see sections 6.3.6, 9.3.4.5 and 9.3.4.6 for further discussion of the nga-augment).

There are two types of variation displayed in Table 6.2, represented by the symbols ‘~’ and ‘/’. The former is used for tense/aspect suffixes that are in free variation: for example, the P2 suffix in ²

[2] The phonologically overt NP1 suffix -ya and P1 -nga have, of course, been noticed by the previous authors. Both Leeding (1989) and Waddy (n.d.-a) propose that NP1 -ya can freely replace the regular non-past tense suffixes. Waddy suggests it is “a command form […] which can be used as an alternative to the Non-Past form”, whereas Enindhilyakwa speakers provided Leeding the information that the suffix is used “when talking to a child” (1989: 433). An analysis of -ya as a suffix that signals atomic changes of state - which include inceptive readings - may explain these observations: the NP1 suffix is particularly common with commands, as in (5d) above, which typically have an inceptive reading, and children are often spoken to in commands (e.g. ‘Sit down!’, ‘Go to sleep!’). However, it also occurs on other forms, such as (5b), with an inceptive reading.

Leeding (1989) accounts for the phonologically null suffixes by making all tense suffixes optional, which corresponds to my -Ø suffix. This is, however, a huge overgeneralisation, because tense/aspect is often obligatorily realised by a non-null suffix - see Table 6.2. Only some categories may be realised by a phonologically null suffix. Waddy (n.d.-a) posits a ‘specific past’ suffix -a, which also can correspond to a null suffix: -Ø will be realised as [a] in word-final position (see e.g. -engkvrrka in [5a]; in the original story the final [a] of this verb is glossed ‘specific past’). But note that this runs into problems when the ‘specific past’ is followed by a suffix, such as -ma in (4a) above, and [a] does not surface but is realised as [ɔ ~ ø].

Stokes (1982) distinguishes two forms of the past and future tenses: ‘normal’ past and future, and ‘near’ past and future. She furthermore establishes two distinct imperative forms, one anticipating a more immediate response than the other. The ‘normal’ past and future corresponds to my P2 and NP2, respectively, and the ‘near’ past and future/immediate imperative correspond to my P1 and P2, respectively.
conjugation 3 freely varies between -na and -rna (e.g. -lhvke-na ~ -lhvka-rna ‘go-P2’). The forward slash is used to separate subclass allomorphs, such as -na / -rna in conjugation 1: the former is the NP2 allomorph of subclass 1A (e.g. -yengbi-na ‘speak-NP2’), whereas the latter is the subclass 1B allomorph (e.g. -yuwa-rna ‘follow-NP2’).

These variations aside, the paradigm displays remarkable conjugational regularity: except for the -∅ suffix, each suffix marks one and only one tense/aspect category. For instance, the suffix -ya always represents NP1, and the -na suffix is always NP2. Such regularity is atypical of the Gunwinyguan languages, where the same suffix may mark different categories in different conjugations (Evans 2003a: 359-61; Alpher, Evans & Harvey 2003). This regularity will be suggested in section 9.3.4 to be due to rather recent paradigmatic levelling.

The analysis of the paradigms outlined in this section leans heavily on Heath’s (n.d.) sketch grammar, and differs significantly from those proposed by Stokes/Waddy and Leeding, who claim that the suffixes denote tense only. (It is quite common for non-Pama-Nyungan languages for the tense suffixes to also incorporate aspect; see Verstraete 2005). The number of conjugations presented here is different from the assumed numbers in all previous work: Heath (n.d.) lists nine different conjugations (some of which are merged in my analysis); Leeding (1989) argues for five different classes (she fails to recognise classes 4 and 5); and the dictionary contains about 23 different classes (many of which only differ in the quality of the final vowel of the verb stem).

The paradigms proposed here differ from those in Heath (n.d.) in that most verb stems end in a vowel (as is the case in Wubuy, and in the Gunwinyguan languages in general). According to Heath, all verb stems end in a consonant, and an epenthetic vowel is inserted between the stem and a consonant-initial suffix. The problem with this idea is that some of these ‘epenthetic’ vowels are not indistinct, short or unstressed, as would follow from Heath’s analysis. They may receive primary stress, which makes them unlikely to be epenthetic. In the Stokes/Waddy and, to some extent, Leeding, accounts these vowels do not belong to the stem, but are taken to be suffix-initial. But such an analysis results in a very large number of conjugations that only differ in the quality of the suffix-initial vowel (up to 23 in the Stokes/Waddy analysis). Assuming these vowels to be stem-final, rather than suffix-initial, gives a simpler account, which involves only six classes.

Nonetheless, in many verb forms it is rather difficult to decide where the morpheme boundary lies, and what the underlying quality of the stem-final vowel or the exact form of the suffix is. This is because the same verb may have a number of different stem forms for different TAM categories. This is a common feature of the Gunwinyguan languages (Alpher, Evans & Harvey 2003; Baker & Harvey 2003; Baker 2004, 2008). For example, the different stems forms of the root -dhida- ‘shut’ (Table 6.6 below) are: NP1 -dhidi-ya, NP2 -dhide-na, P1 -dhidy-nga; P2 -dhida-ngy; CAUS -dhidi-ji-. We could account for this by setting up suffix base forms like -iya, -ena, -nga, and so forth, but
this is not very satisfactory since some of the suffixes in question are attested elsewhere with different preceding vowels (e.g. NP2 -makv-na ‘tell’, Table 6.8, or -yengbi-na ‘say’, Table 6.3), or lacking the initial vowel (e.g. NP2 -lharr-na ‘fall’, Table 6.3). Furthermore, some stem forms appear to be phonologically conditioned, such as NP1 -dhidi-ya and CAUS -dhidi-ji-, where stem-final [i] is conditioned by the following palatal. Phonological differences between other stem forms may be explained by now unproductive phonological processes, as investigated in detail in Chapter 9. For example, the NP2 -me-na of the root -ma- ‘get’ is proposed to be a reflex of *-ma-ni, preserved in Wubuy and Ngandi. The stem-final a has raised to e in Enindhilyakwa due to the i in the next syllable (rule P-5). And yet again other forms cannot be explained away by some phonological rule or historical reconstruction, such as P1 -dhidv-nga of -dhida- ‘shut’. I will generally take the p2 form minus the suffix as the citation form of the verb root, as this tends to be the most “neutral” form, least subject to conditioning (cf. p2 -dhida-ngv). It is also the stem form that corresponds best to the Gunwinyguan verb stems, as we will see in Chapter 9. The stem forms of each tense/aspect category, as well as the stem forms of the derivational suffixes, need to be listed as part of each verb’s conjugation.

Finally, another important feature to note is that most p2 suffixes, as well as some of the NP1 and P1 unsuffixed stems, typically end in -v (the orthographic symbol for /ə/). But this vowel rarely surfaces with this quality: when word-final, it is always realised as [a] (word-final vowel conversion rule P-7B). For example, the p2 suffix -nv of -yengbi- ‘speak’ (conjugation 1A) becomes -na in word-final position: -yengbi-na ‘speak-p2’. When followed by another suffix /ə/ assimilates to the initial consonant of the suffix. /ə/ is invariably realised as [u] when followed by a labialised velar (vowel rounding and backing rule P-2): e.g. /jeŋpi-na-wa/ ‘speak-p2-ALL’ is phonetically [jeŋpinuwa] (since there is no variation this is represented as -yengbi-nu-wa in the orthography). When followed by a bilabial consonant /a/ may obtain some rounding and vary with [ɔ] (vowel rounding and backing rule P-8): e.g. /jeŋpi-na-ma/ ‘speak-p2-ma’ varies between [jeŋpinəma] and [jeŋpinəma] (and is therefore transcribed as -yengbi-nv-ma). When followed by a lamino-palatal, /ə/ is invariably realised as [i] (vowel fronting rule P-9): e.g. /jeŋpi-na=jaJa/ ‘speak-p2=purp’ [jeŋpinija=ja] (orthographically: -yengbi-ni=ya).}

Due to the word-final vowel conversion rule P-7B two underlyingly distinct suffixes can be identical on the surface: -yengbi-na ‘speak-tense’ can be either NP2 (underlying: /jeŋpi-na/) or p2 (underlying: /jeŋpi-na/). This underlying difference only shows up when followed by another suffix: NP2 -yengbi-na-ma [jeŋpinama] vs. p2 -yengbi-nv-ma [jeŋpinəma ~ jeŋpinəma]. It should thus be kept in mind that although suffixes and stems in the following tables can end in /ə/, this is

3 In fact, Heath (n.d.) proposes that the function of the otherwise meaningless -ma suffix is to distinguish between NP2 and p2 in some conjugations. We will see in section 6.7 that this cannot be the full story, and that this suffix does have meaning.
rarely their surface quality: all word-final vowels are realised as [a], whereas they may assimilate in place to a following consonant.

6.3.1 Conjugation 1: -na ~ -rna, -nv ~ -rnv

Conjugation 1 is the largest conjugation, comprising altogether 61% of the 251 verb roots in Leeding’s corpus (1989: 432). It is characterised by the NP2 suffixes -na / -rna and P2 suffixes -nv / -rnv. The NP1 and P1 suffixes are both -∅, and the NP3 is -ma. Several subclasses can be distinguished based on the presence of the retroflex nasal, and also on the quality of the stem-final vowel. The verb stems in this class end in /i/, /a/, or a consonant.

• Subclass 1A: -na, -nv [JH classes 8E (-na, -n), 8F (-ena, -en); JW multiple classes (-ina, -ina; -una, -una; etc.); VL classes 1A (-ni, -ni), 2A (-a(r)ni, -a(r)ni)]

Subclass 1A is characterised by the absence of retroflexion in the NP2 and P2 suffixes. This is the largest class, containing 51% of verb roots in Leeding’s corpus, plus the REFL, RECP and INCH derivational suffixes. Subclass 1A itself can be subdivided into five subclasses, based on the quality of the stem-final vowel in the citation form (which is the P2 form minus the suffix), and when followed by a derivational suffix. They are presented in Table 6.3.

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<tbody>
<tr>
<td>NP1</td>
<td>-∅</td>
<td>-erikbi-∅</td>
<td>-mebi-∅</td>
<td>-bijangy-∅</td>
<td>-ngambe-∅</td>
<td>-jungu-∅</td>
</tr>
<tr>
<td>NP2</td>
<td>-na</td>
<td>-erikbi-na</td>
<td>-mebi-na</td>
<td>-bijangy-na</td>
<td>-ngambe-na</td>
<td>-jungu-na</td>
</tr>
<tr>
<td>NP3</td>
<td>-ma</td>
<td>-erikbi-ma</td>
<td>-mebi-ma</td>
<td>-bijangy-ma</td>
<td>-ngambe-ma</td>
<td>-jungu-ma</td>
</tr>
<tr>
<td>P1</td>
<td>-∅</td>
<td>-erikbi-∅</td>
<td>-mebi-∅</td>
<td>-bijangy-∅</td>
<td>-ngambe-∅</td>
<td>-jungu-∅</td>
</tr>
<tr>
<td>P2</td>
<td>-nv</td>
<td>-erikbi-∅</td>
<td>-mebi-∅</td>
<td>-bijangy-∅</td>
<td>-ngambe-∅</td>
<td>-jungu-∅</td>
</tr>
<tr>
<td>REFL</td>
<td>-jungwV-</td>
<td>-erikbi-jungwV-</td>
<td>-mebi-jungwV-</td>
<td>-bijangy-jungwV-</td>
<td>-ngambe-jungwV-</td>
<td>-jungu-jungwV-</td>
</tr>
<tr>
<td>RECP</td>
<td>-yi</td>
<td>-erikbi-ji-</td>
<td>-mebi-ji-</td>
<td>-bijangy-ji-</td>
<td>-ngambe-ji-</td>
<td>-jungu-ji-</td>
</tr>
<tr>
<td>CAUS</td>
<td>-ji</td>
<td>-erikbi-ji-</td>
<td>-mebi-ji-</td>
<td>-bijangy-ji-</td>
<td>-ngambe-ji-</td>
<td>-jungu-ji-</td>
</tr>
</tbody>
</table>

Table 6.3: Conjugation 1A: -na, -nv (verb stems ending in /i/, /a/, /e/ or a consonant)

In subclass 1A(i) the stem-final vowel is either /i/ or /a/. This vowel is preceded by a non-nasal consonant and is realised as [i] when followed by the REFL -jungwV- or CAUS -ji- suffixes. Stems in subclass 1A(ii) end in /i/, which becomes [a] for the CAUS suffix. In subclass 1A(iii) the stem-final vowel is /i/ or /a/, which is preceded by a nasal consonant. It is realised as [a] when followed by REFL or CAUS suffixes. In subclass 1A(iv), the stem-final vowel is /e/, which is realised as [a]
when followed by the REFL or CAUS suffix. In subclass 1A(v) the stem-final vowel is preceded by a labialised velar and absorbs its labialisation and is realised as [u] (vowel rounding and backing rule P-3). Since both /i/ and /a/ can absorb the labialisation of preceding labialised velars, it is impossible to determine the underlying quality of the stem-final vowel, which is represented as /V/. This vowel is realised as [a] when followed by the REFL or CAUS suffix and the labialisation of the velar is preserved. Finally, subclass 1A(vi) involves stems ending in a consonant. An epenthetic vowel is inserted between the stem and the suffix (which becomes [a] when word-final).

In all five subclasses, the RECP suffix -yi- is preceded by ee (the orthographic symbol for [e]). Recall that the stem- and suffix-final vowels in this and the following tables are underlying values, which may only surface when followed by another suffix; when word-final, all vowels are realised as [a]. So the NP1 stem -errikbv- is [ɛɾikpa] when not followed by a suffix, but [ɛɾikpɔma ~ ɛɾikpɔma] when followed by -ma.

Some of the verbs belonging to the various 1A classes are (including the number of attested roots from Leeding 1989 and the dictionaries where possible):

(6)  

<table>
<thead>
<tr>
<th>Class 1A(i)</th>
<th>Class 1A(ii) (5 roots)</th>
<th>Class 1A(iii)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-dhv- ‘INCH’</td>
<td>-mebi- ‘sing’</td>
<td>-akbijangv- ‘jump’</td>
</tr>
<tr>
<td>-yi- ‘RECP’</td>
<td>-beki- ‘drink’</td>
<td>Thematic +mv-</td>
</tr>
<tr>
<td>Thematic +bi-</td>
<td>-margki- ‘laugh’</td>
<td>(e.g. -lhakar+mv- ‘choke’</td>
</tr>
<tr>
<td>(e.g. -yeng+bi- ‘speak’</td>
<td>-ngwanji- ‘stop’</td>
<td>-rer+mv- ‘become dry’</td>
</tr>
<tr>
<td>-errik+bi- ‘throw’</td>
<td>-rarrki- ‘be ready’</td>
<td>-ngaruku+mv- ‘fish by line’</td>
</tr>
<tr>
<td>-errekk+bi- ‘vomit’</td>
<td></td>
<td>-nyirr+mv- ‘blow nose’</td>
</tr>
<tr>
<td>Thematic +bv-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e.g. -mvdhilyak+bv- ‘cough’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-rak+bv- ‘blow didgeridoo’)</td>
<td></td>
<td>(e.g. -warde+mi- ‘cry out’</td>
</tr>
<tr>
<td>-dharr+bv- ‘move away’</td>
<td></td>
<td>-dhvrreng+mi- ‘explode’</td>
</tr>
<tr>
<td>Thematic +lhv-</td>
<td></td>
<td>-edhvrrre+mi- ‘deny’</td>
</tr>
<tr>
<td>(e.g. -lhaku+lhv- ‘be joined together’</td>
<td></td>
<td>+arrngv- ‘bend’</td>
</tr>
<tr>
<td>-abv+lhv- ‘be mixed’</td>
<td></td>
<td>+barrngv- ‘be heavy’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class 1A(iv) (19 roots)</th>
<th>Class 1A(v) (5 roots)</th>
<th>Class 1A(vi) (6 roots)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ngambe- ‘bathe’</td>
<td>-jungwV- ‘REFL, die’</td>
<td>-lharr- ‘fall’</td>
</tr>
<tr>
<td>-awiyabe- ‘enter, wear’</td>
<td>-walyuwV- ‘be/come ripe’</td>
<td>-angkarr- ‘run’</td>
</tr>
<tr>
<td>-wilyake- ‘spin, go around’</td>
<td>-njirrkVw- ‘move’</td>
<td>-alyvbar-3 ‘eat’</td>
</tr>
<tr>
<td>-lyingkwe- ‘spread’</td>
<td>-ajabangwV- ‘creep’</td>
<td>-warr- ‘move’</td>
</tr>
<tr>
<td>-angmardhe- ‘hate’</td>
<td>-ebirranguV- ‘defecate’</td>
<td>+barr- ‘split’</td>
</tr>
</tbody>
</table>

---

4 The dictionary lists the CAUS form of this verb as -margka-jīi- ~ -margki-jīi- ‘to laugh at’.

5 In Leeding’s (1989) material the stem form of this verb is alyvb, not alyvbar. This verb takes NP2 and P2 suffixes -arrv, -arrn in her analysis. However, the nominalised form of this verb in the Waddy Dictionary is a-kt-alyvbar ‘food’, which indicates that the stem is alyvbar- (with reduplication in the nominalised form). Leeding’s analysis in fact confirms the one proposed here, because I claim that an epenthetic vowel is inserted between the stem alyvbar- and the tense/aspect suffixes -na, -nv. Being epenthetic, this vowel may be barely audible: [aʃaɾaŋa ~ aʃaɾaŋa]. Leeding presumably only heard [aʃaɾaŋa] and thus concluded that the suffix must involve a retroflex nasal (i.e. belong to my subclass 1B).
Determining the underlying quality of the stem-final vowel is complicated by the fact that the Leeding and Stokes/Waddy orthographies do not distinguish between [i] and [ə], representing both as i (or, in the Stokes/Waddy orthography, also as u; see Chapter 2). However, the distinction between say, thematic +bv- and +bi- is important: as we will see in Chapter 9, these correspond to different verb roots in Wubuy. They are therefore not the same morphemes, and recognising the distinction helps in reconstructing proto-forms.

**Subclass 1B: -rna ~ -na, -rnv ~ -nv [JH class 8J (-rna, -arn); JW multiple classes (-arna, -arna; -irna, -arna, etc.); VL class 2A (-a(r)ni, -a(r)ni)]**

The np2 and p2 suffixes in subclass 1B freely vary between an alveolar nasal and a retroflex nasal. The np1, np3 and p1 suffixes are the same as in subclass 1A. Subclass 1B constitutes 10% of all roots in Leeding’s corpus, and they all end in /a/. Based on the vocalic contrast that accompanies the apical contrast, subclass 1B can be split in two: in subclass 1B(i), the retroflex nasal is preceded by the mid-vowel [a], and the alveolar nasal by the front vowel [ɛ]. This subclass only contains thematic +wa-. In subclass 1B(ii), the alveolar and retroflex nasal vary without affecting the preceding vowel. Table 6.4 presents the paradigm of subclass 1B(i).

<table>
<thead>
<tr>
<th>Suffixes</th>
<th>1B(i): +wa- (e.g. -mvrndu+wa- ‘count’)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP1</td>
<td>-Ø</td>
</tr>
<tr>
<td></td>
<td>-mvrndu+wa-Ø</td>
</tr>
<tr>
<td>NP2</td>
<td>-rna ~ -na</td>
</tr>
<tr>
<td></td>
<td>-mvrndu+wa-rna ~ -mvrndu+we-na</td>
</tr>
<tr>
<td>NP3</td>
<td>-ma (~ -ngyma?)</td>
</tr>
<tr>
<td></td>
<td>-mvrndu+wa-ma</td>
</tr>
<tr>
<td>P1</td>
<td>-Ø</td>
</tr>
<tr>
<td></td>
<td>-mvrndu+wa-Ø</td>
</tr>
<tr>
<td>P2</td>
<td>-rnv ~ -nv</td>
</tr>
<tr>
<td></td>
<td>-mvrndu+wa-rnv ~ -mvrndu+we-nv</td>
</tr>
<tr>
<td>REFL</td>
<td>-jungwV-</td>
</tr>
<tr>
<td></td>
<td>-mvrndu+wa-jungwV-</td>
</tr>
<tr>
<td>RECP</td>
<td>-yi-</td>
</tr>
<tr>
<td></td>
<td>-mvrndu+wee-yi-</td>
</tr>
<tr>
<td>CAUS</td>
<td>-ji-</td>
</tr>
<tr>
<td></td>
<td>-mvrndu+wa-ji-</td>
</tr>
</tbody>
</table>

Table 6.4: Conjugation 1B(i): -rna ~ -na, -rnv ~ -nv (thematic +wa-)

Three complex stems are composed of this thematic:

(7)  -mvrndhvrru+wa- ‘bring to a halt’
     -dhvrru+wa- ‘bury’
     -mvrndu+wa- ‘count, sort’

The vocalic contrast that accompanies the apical contrast occurs in other contexts too, such as the p2 of conjugation 3 below, and in demonstratives (e.g. -arna ~ -ena ‘this’) (section 2.5.8). It may be expected given the compatibilities between vowel place and apical place (Flemming 2003).

Subclass 1B(ii) lacks the vocalic contrast and can be further subdivided based on the quality of the stem-final vowel when followed by a derivational suffix. In subclass 1B(ii-a) the retroflex
nasal does not vary with an alveolar, whereas in subclass 1B(ii-b) both apicals are attested in the NP2. Table 6.5 presents the paradigms.

<table>
<thead>
<tr>
<th>Suffixes</th>
<th>1B(ii-a): +wa- (e.g. -yu+wa- ‘follow’)</th>
<th>1B(ii-b): -arrka- ‘pull’</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP1  -Ø</td>
<td>-yu+wa-Ø</td>
<td>-arrkv-Ø</td>
</tr>
<tr>
<td>NP2  -r-na ~ -na</td>
<td>-yu+wa-r-na</td>
<td>-arrkv-r-na ~ -arrkv-na</td>
</tr>
<tr>
<td>NP3  -ma (~ -ngvma)</td>
<td>-yu+wa-ma ~ -yu+wa-ngvma</td>
<td>-arrkv-ma ~ -arrka-ma</td>
</tr>
<tr>
<td>P1  -Ø</td>
<td>-yu+wa-Ø</td>
<td>-arrka-Ø ~ -arrkv-Ø</td>
</tr>
<tr>
<td>P2  -r-nv</td>
<td>-yu+wa-rnv</td>
<td>-arrka-rnv</td>
</tr>
<tr>
<td>REFL -jungwV-</td>
<td>-yu+wa-jungwV-</td>
<td>-arrka-jungwV-</td>
</tr>
<tr>
<td>RECP -yi-</td>
<td>-yu+wee-yi-</td>
<td>-arrke-yi-</td>
</tr>
<tr>
<td>CAUS -ji-</td>
<td>-yu+wa-ji-</td>
<td>-arrka-ji-</td>
</tr>
</tbody>
</table>

Table 6.5: Conjugation 1B(ii): -r-na ~ -na, -r-nv

The forms marked with ‘?’ in this table are not attested but are extrapolated from other verbs in the same subclass. The retroflex nasal in the NP2 is not attested for all 1B(ii-a) verbs, but their NP2 suffix is always pr

The forms marked with ‘?’ in this table are not attested but are extrapolated from other verbs in the same subclass. The retroflex nasal in the NP2 is not attested for all 1B(ii-a) verbs, but their NP2 suffix is always preceded by [a], which suggests the former presence of an retroflex (see Chapter 2). Verbs belonging to the two 1B(ii) subclasses include:

(8) Class 1B(ii-a) (2 roots)

- ma- ‘light a fire’
  Thematic +wa- (e.g. -yu+wa- ‘follow’)
  -yarru+wa- ‘go past’
  -ngadhu+wa- ‘cry for’
  -marra+wa- ‘wander’
  -bvrri+wa- ‘crawl’)

Class 1B(ii-b) (7 roots)

- akbvranga- ‘find’
  -yaka- ‘take away from’
  +arrnga- ‘break, split, bend’
  -arrka- ‘pull’
  -akuma- ‘put’
  -lhmakba- ‘look for turtle eggs’
  -angka- ‘fetch’

More complex stems composed of thematic +wa- can be found in Chapter 5, Table 5.9. The RECP form of -akbvranga- ‘find’ varies between -akbvrangee-yi- and -akbvranga-nja-. In Chapter 9 I will argue that the latter aberrant form is a remnant of the proto-Gunwininyguan RECP form *-nyji-

6.3.2 Conjugation 2: -na, -ngv [JH class 8B (-ena, -ang]; JW class -ena, -anga; VL class 2B (-ani, -ang)]

This is another large conjugation, containing 31% of the 251 verb roots in Leeding’s corpus. It is characterised by the NP2 ending -na and the P2 ending -ngv. The stems in this class presumably end in /a/, but this vowel undergoes the most changes in comparison with the other conjugations. One important change is its realisation as [ɛ] in the NP2 forms. Two subclasses can be distinguished based on the quality of stem-final vowel when followed by a derivational suffix, which is fully predictable: in subclass 2A, this vowel is preceded by a peripheral consonant, and
/a/ quality is preserved when followed by a derivational suffix (though as usual it raises to ee [e] when followed by RECP -yi-). In subclass 2B, the stem-final vowel is preceded by a coronal consonant and is realised as [i] when followed by a derivational suffix. Subclass 2B is the only context in which the RECP suffix is preceded by [i] instead of [e].

| Suffixes | 2A: (+)ma- ‘get, thematic’ C [+coronal] a|+ | 2B: -dhida- ‘shut’ C [+coronal] a|+ |
|----------|---------------------------------------------|---------------------------------------------|
| NP1      | -ya                                    | -mi-ya                                   | -dhidi-ya                               |
| NP2      | -na                                    | -me-na                                   | -dhide-na                                |
| NP3      | -ma (~ -ngvma?)                        | -mv-ma ~ -ma-ngvma                       | -dhidy-ma                               |
| P1       | -Ø ~ -ngvma                            | -mv-Ø                                    | -dhidy-Ø ~ -dhidy-nga                    |
| P2       | -ngv                                   | -ma-ngv                                  | -dhida-ngv                              |
| REFL     | -jungwV-                               | -ma-jungwV-                             | -dhidi-jungwV-                          |
| RECP     | -yi-                                   | -mee-yi-                                 | -dhidi-yi-                              |
| CAUS     | -ji-                                   | -ma-ji-                                  | -dhidi-ji-                              |

Table 6.6: Conjugation 2: -na, -ngv (verb stems ending in /a/)

The verbs belonging to conjugation 2 include the thematics +ma- and +dha- (see Table 5.9). Other verbs belonging to this conjugation are listed in (9).

(9) **Class 2A (3 roots)**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>-ma-</td>
<td>‘get’</td>
</tr>
<tr>
<td>Thematic +ma-</td>
<td></td>
</tr>
<tr>
<td>(e.g.)</td>
<td>-wurv+ma- ‘rise, fly away’</td>
</tr>
<tr>
<td></td>
<td>-lharr+ma- ‘chase’</td>
</tr>
<tr>
<td></td>
<td>-yirr+ma- ‘swim’</td>
</tr>
<tr>
<td>-lhawulhawa-</td>
<td>‘be stretched out’</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>+dha-</td>
<td>‘thematic’</td>
</tr>
<tr>
<td></td>
<td>-jira-</td>
</tr>
<tr>
<td>+bvrra-</td>
<td>‘hit’</td>
</tr>
<tr>
<td></td>
<td>-arnvrra-</td>
</tr>
<tr>
<td></td>
<td>-ridha-</td>
</tr>
<tr>
<td></td>
<td>+bajra-</td>
</tr>
<tr>
<td></td>
<td>-warda-</td>
</tr>
<tr>
<td></td>
<td>-rijra-</td>
</tr>
<tr>
<td></td>
<td>-wurdra-</td>
</tr>
<tr>
<td></td>
<td>-ardra-</td>
</tr>
<tr>
<td></td>
<td>-kura-</td>
</tr>
<tr>
<td></td>
<td>-arrikarra-</td>
</tr>
<tr>
<td></td>
<td>-aya-</td>
</tr>
<tr>
<td></td>
<td>-vuura-</td>
</tr>
</tbody>
</table>

Conjugations 1 and 2 comprise 92% of verb roots in Leeding’s corpus. The remaining four conjugations account for 8% of Enindhilyakwa verbs.

**6.3.3 Conjugation 3: -ja, -rnav ~ -nv [JH class 8H (-aja, -arn ~ -en); JW -aja, -ena ~ -arna; VL class 2C (-atja, -arj)]**

Conjugation 3 is characterised by the NP2 -ja and the P2 with two allomorphs: one involving a retroflexed nasal and preservation of the stem-final /a/, and one involving an alveolar nasal and a vocalic change from stem-final /a/ to [ɛ]. Table 6.7 presents the paradigms.
### Table 6.7: Conjugation 3: -ja, -rnv ~ -nv (verb stems ending in /a/)

<table>
<thead>
<tr>
<th>Suffixes</th>
<th>3: -lhvka- ‘go’</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP1</td>
<td>-ya -lhvki-ya</td>
</tr>
<tr>
<td>NP2</td>
<td>-ja -lhvka-ja</td>
</tr>
<tr>
<td>NP3</td>
<td>-ma ~ -ngvma -lhvkv-ma ~ -lhvka-ngvma</td>
</tr>
<tr>
<td>p1</td>
<td>-Ø -lhvka-Ø</td>
</tr>
<tr>
<td>p2</td>
<td>-rnv ~ -nv -lhvka-rnv ~ -lhvke-nv</td>
</tr>
<tr>
<td>REFL</td>
<td>-jungwV- (-lhaba-jungwV-)</td>
</tr>
<tr>
<td>RECP</td>
<td>-yi- -lhvkee-yi-</td>
</tr>
<tr>
<td>CAUS</td>
<td>-ji- -lhvka-ji-</td>
</tr>
</tbody>
</table>

This conjugation contains the thematics +ba- and +ka- (see Table 5.9), and the verb -lhvka- ‘go’, as listed in (10).

(10) **Class 3 (3 roots)**

<table>
<thead>
<tr>
<th>Thematic +ka-</th>
<th>Thematic +ba- (3 examples)</th>
<th>-lhvka- ‘go’</th>
</tr>
</thead>
<tbody>
<tr>
<td>(e.g. -lhawurr+ka- ‘taste, try, test’ -arnda+ka- ‘hunt’ -wal+ka- ‘sneak up on’ -lharr+ka ‘send’ -ngurr+kwa- ‘hunt’)</td>
<td>(-lhek+ba- ‘accuse, blame’ -lhaba ‘taste, try, test’ -kwiyerrba ‘make a mistake’)</td>
<td>-lhvka- ‘go’</td>
</tr>
</tbody>
</table>

The majority of verbs in this conjugation are composed of thematic +ka-, which may derive historically from the stem *-ka- ‘carry’ (cf. pGN *ka- ‘take, carry’). However, this verb no longer exists separately and no synchronic segmentation is viable (Heath 1984: 470 suggests the same for Wubuy).

6.3.4 **Conjugation 4: -na, -Ø [JH class 8C (-na, -a); JW (-ina, -a; -una, -a); VL: -]**

This class is characterised by the p2 ending -Ø. The stem-final vowel in this class is /a/, which is preserved in all environments except in the NP2 and one allomorph of the NP3, where it is weakened to [ø]. Table 6.8 presents the paradigm, and some verb roots belonging to this class are listed in (11). This is the only conjugation where there is no formal distinction between p1 and p2; these are thus glossed ‘PST’ in the examples (e.g. [21b] below).

---

6 This verb does not contain thematic +ka-, but derives from alhvka ‘NEUT.foot’, which in turn may be related to Ritharrngu rluku ‘foot’ (pPN: *luku [Alpher 2004]).

7 Leeding (1989) does not identify this verb class, which is probably because tense suffixes are optional in her analysis. The absence of a tense suffix has the same effect as the -Ø suffix proposed here. According to Leeding, any verb without an inflectional suffix can represent either past or non-past tense. This is however a huge overgeneralisation, because the tense/aspect suffixes are mostly obligatorily realised by overt material. In conjugation 3 above, for instance, the only category that is realised as -Ø is the p1; all other categories take non-null suffixes.
Table 6.8: Conjugation 4: -na, -Ø (verb stems ending in /a/)

<table>
<thead>
<tr>
<th>Suffixes</th>
<th>4: -maka- ‘tell’</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP1</td>
<td>-Ø</td>
</tr>
<tr>
<td>NP2</td>
<td>-na</td>
</tr>
<tr>
<td>NP3</td>
<td>-ma ~ -angvma</td>
</tr>
<tr>
<td>P1</td>
<td>-Ø</td>
</tr>
<tr>
<td>P2</td>
<td>-Ø</td>
</tr>
<tr>
<td>REFL</td>
<td>-jungwV-</td>
</tr>
<tr>
<td>RECP</td>
<td>-yi-</td>
</tr>
<tr>
<td>CAUS</td>
<td>-ji-</td>
</tr>
</tbody>
</table>

In Chapter 5 I suggested that the FACT suffix originates from grammaticalisation of -kwa- ‘give’. Independent verbs are a common source for derivational suffixes in Australian languages (Schultze-Berndt 2000: 540).

6.3.5 Conjugation 5: -na, -wa [JH class 8D (-na, -wa); JW (-ina ~ -uwa); VL -8]

This conjugation is characterised by the p2 suffix -wa. Its sole member is the CAUS suffix -ji- (section 5.4.1.2). Its paradigm is illustrated in Table 6.9 with the verb -yakwabi-ji- ‘forget’.

<table>
<thead>
<tr>
<th>Suffixes</th>
<th>5: CAUS -ji-</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP1</td>
<td>-ya</td>
</tr>
<tr>
<td>NP2</td>
<td>-na</td>
</tr>
<tr>
<td>NP3</td>
<td>-ma</td>
</tr>
<tr>
<td>P1</td>
<td>-Ø</td>
</tr>
<tr>
<td>P2</td>
<td>-wa</td>
</tr>
<tr>
<td>REFL</td>
<td>-jungwV-</td>
</tr>
<tr>
<td>RECP</td>
<td>-yi-</td>
</tr>
</tbody>
</table>

Table 6.9: Conjugation 5: -na, -wa (causative suffix)

---

8 This class is also not recognised as a separate class by Leeding, who subsumes it under her class 1A (-ni, -nì), which corresponds to my class 1A. It is unclear why Leeding fails to recognise the suffix -wa as a tense suffix; it may be due to transcriptional errors, e.g. NP2 verbs that have been mistakenly transcribed as p2. Her data do contain some causatives with the -wa suffix, which she glosses as ‘stem formative’ (e.g. 1989: 385).

9 Heath also includes the stem -ngaja- ‘hit’ in this conjugation, but this stem belongs to conjugation 4 (-na, -Ø) in the dictionary, and this is also how my informants inflected it. It is unclear whether this difference can be attributed to the dialect of Heath’s single informant, or to language change.
The causative suffix is very productive and derives transitive verbs from intransitive stems. Most often the derivation is transparent, such as -lharr- ‘fall’ > -lharrji- ‘drop’. In some instances the root that the suffix attaches to is unknown, such as -akurra+ji- ‘wait for’ (cf. akurra ‘?’). These are taken to be lexicalised causatives; see section 5.4.1.2 for further discussion.

6.3.6 Conjugation 6: -O, -O [JH class 8G (-a, -O); JW multiple classes; VL 1B (-ni, -nga)]

This is a highly distinct class, composed mainly of stance verbs. It is characterised by the allomorph -O in all positive categories (i.e., all but the NP3). It is furthermore distinguished by an ‘augment’ -nga- that is added to the stem in the NP1 and P1, and to which the tense/aspect suffixes are added. Although this augment may have the appearance of an inflectional suffix, as it can be replaced by a regular suffix (for example, the two allomorphs of the NP1 of -mungkulha- ‘sleep’ are: -mungkulhv-nga and -mungkulhi-ya), I will assume that the nga-segment is part of the NP1 and P1 stems, rather than an independent tense/aspect suffix.10 This is because nominalised verbs in conjugation 6 are also nga-augmented. A nominalised verb is generated from a bare verb stem by the nominalising prefix k- (section 3.4.6). For example, the nominalised form of -lhvka- ‘go’ is -kv-lhvka (with epenthetic v between the prefix k- and the initial consonant of the stem; rule P-1), which can take the full range of nominal prefixes. Nominalised forms of conjugation 6 verbs, by contrast, are nga-augmented, as illustrated in (12). The NP2 stems of these verbs are: -arjiya- (12a), -mungkulha- (12b), and -ambilya- (12c).

(12) a. a-kv-rrak-arjiyinga dhalyda
   VEG-NR-forehead-stand toilet(VEG)
   ‘toilet’ (Lit: ‘toilet for forehead being upright’)  (Angurugu Linguistics)

b. ma-mv-kv-mungkulhvnga
   VEG-INAP-NR-sleep
   ‘bed, mattress’ (Lit: ‘something of VEG class belonging to sleeping’)  (WD)

c. Nvngu-warv-mv=baba nvng-env-k-ambilyinga ...
   1-not.want.P1-ma=REAS 1-m-NR-stay
   ‘Because I didn’t want to stay …’  (‘Search’ z117)

It thus appears that nominalised verbs are built from the NP1 / P1 stem.

Three subclasses can be distinguished in conjugation 6, based on the shape of the suffix allomorphs. Subclass 6A is characterised by variation of -O with -ya in the NP1. Only the -O variant appears on the nga-augmented stem, whereas the -ya suffix replaces the augment. Subclass 6B is distinguished by replacement of the NP2 and P2 suffixes by those of conjugation 1A, the largest conjugation. And subclass 6C is identified by the absence of the NP1 allomorph -ya, and by the alternation of NP2 -O with -na. Another feature that sets this subclass apart from the other two

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10 Although at this point it cannot be ruled out that the nga-element is meaningful, for instance that it derives inchoatives from stance verbs (Eva Schultze-Berndt, p.c). Hence more research is needed to determine the distribution of this element.
is the vocalic change in the \( p_2 \) stem forms. What unites these subclasses is the \( nga \)-augment in (at least one allomorph of) the \( NP_1 \) and \( P_1 \) and in the nominalised forms, as can be seen in the following three tables. Furthermore, all conjugation 6 verbs are intransitive stance verbs and lack a \textit{REFL} form.

Table 6.10 presents the paradigm of subclass 6A; this subclass has no attested \textit{RECP} forms.\(^{11}\)

<table>
<thead>
<tr>
<th>Augments + suffixes</th>
<th>6A: -( mungkulha- ) ‘sleep’</th>
<th>6A: -( ambilya- ) ‘be in one place’</th>
</tr>
</thead>
<tbody>
<tr>
<td>( NP_1 )</td>
<td>-( nga-Ø \sim -ya )</td>
<td>-( mungkulhv-nga-Ø \sim -mungkulhi-ya ) -</td>
</tr>
<tr>
<td>( NP_2 )</td>
<td>-( Ø )</td>
<td>-( mungkulha-Ø )</td>
</tr>
<tr>
<td>( NP_3 )</td>
<td>-( ma \sim -angvma? )</td>
<td>-( mungkulhv-( ma )</td>
</tr>
<tr>
<td>( P_1 )</td>
<td>-( nga-Ø )</td>
<td>-( mungkulhv-nga-Ø )</td>
</tr>
<tr>
<td>( P_2 )</td>
<td>-( Ø )</td>
<td>-( mungkulhv-( Ø )</td>
</tr>
<tr>
<td>( RECP )</td>
<td>-( yi- )</td>
<td>---</td>
</tr>
<tr>
<td>( CAUS )</td>
<td>-( ji- )</td>
<td>-( mungkulhi-( ji- )</td>
</tr>
<tr>
<td>( NSR )</td>
<td>-( nga )</td>
<td>-( \text{kv-}mungkulhv-( nga )</td>
</tr>
</tbody>
</table>

Table 6.10: Conjugation 6A: -\( Ø, -Ø \) (with augment -\( nga \))

Subclass 6A comprises five verbs:

(13) Class 6A (5 verbs)
- \( mungkulha- \) ‘sleep’
- \( mvrrkulha- \) ‘lie down’
- \( ambilya- \) ‘stay, live, be in one place’
- \( dhvrvrvnda- \) ‘descend’
- \( abilyuwendha- \sim -ablohluwendha- \) ‘bow down’

In subclass 6B, the \( NP_2 \) and \( P_2 \) suffixes are the same as those in conjugation 1. The three verbs belonging to this subclass are listed in (14), while Table 6.11 presents the paradigm, illustrated with the verb -\( ambarr- \) ‘sit’. This verb undergoes a vocalic change in the \( P_1 \).

(14) Class 6B (3 verbs)
- \( ambarr- \) ‘sit’
- \( +lha(lhv)- \) ‘be upright’
- \( kvrrruwanji- \) ‘smell’

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\(^{11}\) However, these are expected to exist, as the \textit{RECP} also has a collective reading. Hence a \textit{RECP} stance verb, as in a hypothetical example such as ‘we were all sleeping’, is expected to be possible. Indeed, an attested example with a stance verb from subclass 6B is:

(i) \( \text{wurraminya nuw-angmakulhee-yi-na-ma awuruku-manja} \)
\( \text{COLL.goose COLL-sit-RECP-NP2-ma NEUT.billabong-LOC} \)
‘the geese are sitting in the billabong’

(anim4\_dl\_au\_003)
Table 6.11: Conjugation 6B: -na, -nv (with augment -nga-)

Subclass 6C includes only two verbs: -arjiya- ~ -ajjiya- ~ -adhiya- ‘stand’ and -andhiya- ‘look around’, which undergo a vocalic change in the p2: -arjeeyv- and -andheeyv-, respectively. Heath (n.d.) points out the close similarity in the canonical stem-shapes of the two verbs. Both paradigms are given in Table 6.12. There are no attested RECP forms.

Table 6.12: Conjugation 6C: -arjiya- ‘stand’, -andhiya- ‘look around’

The nga-augment that is present on Enindhilyakwa stance verbs is of considerable historical importance, because it is also present in other languages. Stance verbs in the eastern Gunwinyguan languages Wubuy, Ngandi, Ngalakgan, Rembarrnga use a distinct ngV-augment in certain tense/aspect categories of some stance verbs, which is also marginally present in Bininj Gun-Wok (Alpher, Evans & Harvey 2003). The Wubuy nga-augment occurs on stance verbs in the same categories as the Enindhilyakwa augment: NP1 and P1. Compare the (augmented) NP1 and (non-augmented) NP2 forms of the verb ‘lie down’ in the two languages:

(15) Wubuy Enindhilyakwa
NP1 -murrkulha-nga-ng -mvrkulkulhv-nga
NP2 -murrkulhaa -mvrkulkulha

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The corresponding verbs and inflectional paradigms of Wubuy and Enindhilyakwa, as well as the nga-augment is discussed in greater depth in Chapter 9.

6.4 Stems showing class alternations

A number of intransitive verbs class 6 have a transitive counterpart that belongs to class 2:

(16) Intransitive class 6  Transitive class 2
-ambarr- ‘sit’          -abvrra- ‘put down’
-ambilya- ‘stay, live’  -bilya- ‘attach’
-(lha)lh- ‘be upright’   -lha- ‘stretch’

Note that class 2 as a whole has no specific association with transitivity.

A more common class alternation that is accompanied by a change in valency involves Enindhilyakwa classes 1 and 2, though the semantic connection between the verbs is not always obvious (see Leeding 1989: 430). Class 1 verbs are intransitive and class 2 verbs are transitive:

(17) Intransitive class 1  Transitive class 2
-kuwarrv- ‘be torn’      -kuwarra- ‘tear’
-dhadhv- ‘become burnt, cooked’ -dhadha- ‘burn, cook’
+waji- ‘twist’            +baja- ‘hit’
+baji- ‘rub’              +baja- ‘hit’
-miji- ‘search’           -mija- ‘wait for’
-mardhv- ‘be painful’     -marda- ‘covet, hate’
-karrv- ‘move’, ‘hit’     -karra- ‘roast in hot ashes’

Both transitivity alternations, with conjugations corresponding to the Enindhilyakwa classes (Chapter 9), are also described for Wubuy (Heath n.d., 1984: 418-20): for example, the intransitive Wubuy stance verb -burra- ‘sit’ (class NGA1, which corresponds to Enindhilyakwa class 6) has the transitive counterpart -burra- ‘put down’ (class A2, corresponding to Enindhilyakwa class 2). And intransitive A2 verbs have transitive counterparts that show I1 inflection (corresponding to Enindhilyakwa class 1). An example is intransitive -akarlawaja- ‘go across’ (A2) and transitive -akarlawaji- ‘take across’ (I1).

6.5 Semantics of aspect

Enindhilyakwa tense suffixes simultaneously encode aspect, which can either be neutral aspect (NP2, P2), or a subtype of perfective viewpoint aspect which is sensitive to atomic event structures (NP1, P1). Atomic events are non-durative changes of state, which (i) do not have any proper subparts and (ii) are not associated with a scalar change of state (Caudal 1999, 2005a). They are either signalled by a phonologically null suffix in Enindhilyakwa, or by an overt suffix: NP1 -ya

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12 In his Enindhilyakwa sketch grammar, Heath (n.d.) mentions this transitivity alternation in Wubuy and notes that to his knowledge this does not occur in Enindhilyakwa. However, as shown in (16) and (17), it does.
The inchoative change of state meaning of the NP1 and P1 markers is especially clear for stance verbs: these have a clear difference in meaning when marked with a (possibly zero) atomic suffix, from when marked with an aspectually neutral suffix. The former denote ‘assuming the stance or state’ (e.g. ‘stand up’, ‘fall asleep’), whereas the latter usually express ‘being in stance/state’ (e.g. ‘be standing’, ‘be asleep’). This semantic contrast is illustrated in the following pairs of examples: the NP1 or P1 verbs in (a) signal atomic events that entail a change of stance or state, while the NP2

(a) akina akwalya **na-jungu-ma**
   "the fish died"

(b) **Yingi-yardha yenjerra dhv-rnd-enungwa?**
   3f-arrive.P1 around.here 3f-mother-2a.KIN
   ‘Has your mother arrived yet?’

(c) **Yelhakwa ma-ngwanja-ji-ya-hlangwa=pi!**
   at.here IMP.2/VEG-stop-CAUS-NP1-ABL=EXCL
   ‘stop [the car(VEG)] here please!’

(18) a. **Kamv-dhaka-ma nvgk-akina m-akina makarda akwa**
   IRR.VEG/2-sting.NP1-ma 2-that VEG-that VEG.sea and
   kv-mvrdna-mardhv-ma nvgk-envng-arnngk-awura
   IRR.2-all.over-be.in.pain.NP1-ma 2-M.AL-P-times-alone
   ‘The sea (where the bristleworm has been) will sting you, and you will be in pain at once.’

   b. **Ying-errikba m-ingka bi...ya Kururrumanja nvm-arjiyinga**
   FEM-throw.P1 VEG-other and K. VEG-be.upright.P1
   ‘They threw another one [menungkwa ‘VEG.spear’] and it stood up (in the sandbar) at Kururrumanja’

(19) a. **Lhvki-ye=ka nungkwa-lhangu-wa angalya!**
   IMP.2-go-NP1=EMPH 2.PRO-POSS-ALL NEUT.place
   ‘You go to your place!’

   b. **N-angkarry-nv-mvrru...wa, nu-kuwabijanga eeka-manja.**
   3m-run-p2-ma...XTD 3m-jump.P1 NEUT.tree-LOC
   ‘He kept on running (until) he jumped behind a tree.’

   c. **Akwa n-angkarra.**
      and 3m-run.P1
      ‘And he ran off.’

(20) a. **Crocodile and Bluetongue**

The inchoative change of state meaning of the NP1 and P1 markers is especially clear for stance verbs: these have a clear difference in meaning when marked with a (possibly zero) atomic suffix, from when marked with an aspectually neutral suffix. The former denote ‘assuming the stance or state’ (e.g. ‘stand up’, ‘fall asleep’), whereas the latter usually express ‘being in stance/state’ (e.g. ‘be standing’, ‘be asleep’). This semantic contrast is illustrated in the following pairs of examples: the NP1 or P1 verbs in (a) signal atomic events that entail a change of stance or state, while the NP2
and \( p_2 \) verbs in the (b) examples express being in a stance or state (aspect on the verb in [21b] and [22b] is unglossed, because \( -rrvngka- \) is ambiguous between \( p_1 \) and \( p_2 \)).

(21) a. \textbf{warma-junga, arjiyinga}  
IMP.2.rise-REFL.NP1 IMP.2.stand.NP1  
‘Get up! Stand!’ (JH tape 68, ex. 113)  
b. \textbf{ngarra-rrvngka-ma nuw-arjeeyv-ma}  
1/3a-see.PST-ma 3a-stand.p2-ma  
‘I saw them standing there’ (anin4_dl_au_003)

(22) a. \textbf{Nen-ahlhvke-nu...wa, nenv-dhvvrvndvnga, adhalyvma-manja.}  
3mdu-RDP.go-p2...XTD 3mdu-descend.p1 NEUT.river-LOC  
‘The two of them kept on walking (until) they got down to the river.’ (‘Kurrirda’)  
b. \textbf{A-yukujiya cloud na-lhvke-nv, na-dhvvrvndv-ma akina na-rrvngka-ma.}  
NEUT-small " NEUT-go-p2-ma NEUT-descend.p2-ma NEUT.that 3a-see.PST-ma  
‘There was a small cloud coming from above and they saw it coming down.’ (‘Wurrarama’)

(23) a. \textbf{nvngv-rrek-ajeevy-ma kembra nvng-ebilyuwendhvnga-ma}  
1-forehead-be.upright.p2-ma then 1-bow.p1-ma  
‘I was sitting up and then I bowed down’ (anin4_mm_au_002)  
b. \textbf{ying-bvlhuwendhv-ma}  
3f-bow.p2-ma  
‘s he sat with her head down’ (JS2 p.108)

The NP1 and P1 stems are \( nga \)-augmented. A similar semantic contrast between augmented and non-augmented stems is found with stance verbs in some Gunwinyguan languages, where the augmented form is associated with assuming the stance (Alpher, Evans & Harvey 2003). It thus appears that \( ngV \)-augmented stems go a long way back to proto-Gunwinyguan (see Chapter 9).

The \textbf{INCH} suffix, which inherently denotes a change of state, is compatible with both the perfective viewpoint and the aspectually neutral suffixes. Inchoative structures that signal an atomic event have an instantaneous reading, while aspectually neutral inchoatives do not have such restrictions. The \textbf{INCH} marked for atomic aspect in (24a) entails a sudden outburst of anger, which contrasts with the \textbf{INCH} taking a neutral \( p_2 \) suffix in (24b).

(24) a. \textbf{Biya dh-akina-lhangwa dhv-dharrvngka arndvnda na-werrikarda-dha arakba}  
and 3f-that-POSS 3f-woman NEUT.heart NEUT-chest-hot-INCH.P1 compl.act  
‘And his wife got very angry inside.’ (Lit: ‘her heart became hot’) (GED p.189)  
b. \textbf{ni-yekirrerri-dhv-na}  
3m-happy-\textbf{INCH}-p2  
‘he was / became happy’ (VL1 p.370)

The same semantic contrast is involved in (25): the (a) example marked for atomic aspect is nondurative, whereas the (b) example with the aspectually neutral tense suffix does not have such specification.
However, most of these are only used when the speaker wants to be explicit about the atomicity of an event.

The aspectually neutral tense suffixes are compatible with what would be atomic Aktionsarten in languages like English, such as *enter* in (26a), or *return* in (26b). Likewise, verbs marked with a NP2 or P2 suffix can also have an inceptive reading, as in (27), or an punctual reading, as in (28). This means that the NP2 and P2 tense suffixes are truly aspectually neutral, as they can have both imperfective and perfective readings, as well as durative and non-durative, and telic and atelic.

Examples such as (25b) could suggest that the NP2 and P2 suffixes represent imperfective viewpoint aspect, as they describe events that are durative and do not include an endpoint. Yet this cannot be the case, because there are plenty of examples in which these suffixes are compatible with a perfective viewpoint interpretation. In (26a) below, for example, the events marked with the P2 suffixes are clearly perfective: they are described in their totality, from start to finish. The suffixes are also compatible with what would be atomic Aktionsarten in languages like English, such as *enter* in (26a), or *return* in (26b). Likewise, verbs marked with a NP2 or P2 suffix can also have an inceptive reading, as in (27), or an punctual reading, as in (28). This means that the NP2 and P2 tense suffixes are truly aspectually neutral, as they can have both imperfective and perfective readings, as well as durative and non-durative, and telic and atelic.

(25) a. *nvngv-mvdhilyakba*
   1-cough.NP1
   ‘I cough (one cough)’

b. *nvngv-mvdhilyakbv-na*
   1-cough-NP2
   ‘I am coughing (several coughs)’

Examples such as (25b) could suggest that the NP2 and P2 suffixes represent imperfective viewpoint aspect, as they describe events that are durative and do not include an endpoint. Yet this cannot be the case, because there are plenty of examples in which these suffixes are compatible with a perfective viewpoint interpretation. In (26a) below, for example, the events marked with the P2 suffixes are clearly perfective: they are described in their totality, from start to finish. The suffixes are also compatible with what would be atomic Aktionsarten in languages like English, such as *enter* in (26a), or *return* in (26b). Likewise, verbs marked with a NP2 or P2 suffix can also have an inceptive reading, as in (27), or an punctual reading, as in (28). This means that the NP2 and P2 tense suffixes are truly aspectually neutral, as they can have both imperfective and perfective readings, as well as durative and non-durative, and telic and atelic.

(26) a. *ngarra-lhvke-na, ngarr-awiyebe-na, ngarvv-rрак-adjeeya*
   12a-go-P2 12a-enter-P2 12a-forehead-stand.P2
   ‘we went, we came in and we sat down’

   irr.3f-go-NP2 NEUT.place-ALL 3f.PRO-POS-ALL NEUT.house irr.3f-return-NP2
   ‘She will go home to her house, she will return.’

(27) *Biya yingv-nu-warda-nga ambaka eeka-mvrra.* [...] *Nu-ngwadhv-na.* Kemb

and 3f-3m-hit-P2 later NEUT.stick-INST 3m-cry-P2 then
nu-ngwadhv-na n-ibina ngawa arakba.

3m-cry-P2 3m-that still compl.act
   ‘Then she hit him with a stick. [...] He started crying. Then he kept on crying.’ (‘Kurrirda’)

(28) *nvng-andheeya akena ngalha-ja ne-ngbijangv-na*
   1-look-P2 and NEUT.PRO-COF NEUT-jump-P2
   ‘I looked and it [cat(NEUT)] jumped’

(‘Bujikeda’ y20-1)

The aspectually neutral tenses are much more common than the atomic viewpoint tenses. The latter are only used when the speaker wants to be explicit about the atomicity of an event. They are most frequent with positive imperatives, such as (20a) and (21a) above, and (29a) below. However, the aspectually neutral NP2 suffix can also be used in this context, as in (29b,c).

(29) a. *wu-mi-ya bangkulya akwa ridhi-ya ena eeka*
   IMP.2/NEUT-take-NP1 axe(NEUT) and IMP.2/NEUT-chop-NP1 NEUT.this NEUT.tree
   ‘Take the axe and chop down this tree!’

   (VL1 p.413)
b. *awiyebe-na adhukuna berrika-lhangwa
   IMP.2-enter-NP2 there gate(Neut)-ABL
   ‘Enter through the gate!’ (VL1 p.414)

c. *wurrv-nga-rvngkv-na dhaka dhadhukuwarrkawarrka dh-abarda
   IMP.2a-FEM-see-NP2 FEM.that FEM.spider FEM-dangerous
   ‘Look at that dangerous spider!’ (VL1 p.410)

Atomic viewpoint tenses also often appear in narratives that first describe a prolonged activity (‘he kept on doing such and such’), which is marked with an aspectually underspecified tense, and which is then interrupted or ended when suddenly something else happens. The latter event is then frequently marked as an atomic event, as in (20b) and (22a) above, and the following.

(30) *Kvngv-ма-lyangmi-lyang+badje-na-mа mа-m+adhangkwa m-akina,
   IRR.3f-VEG-RDP-head+hit-NP2-mа VEG-INALP+flesh VEG-that
   kvngv-m-akakumv-rnа-mа bи...yа kvngv-mа-jerrukwa.
   IRR.3f-VEG-RDP.put-NP2-mа and...XTD IRR.3f-VEG-finish.NP1
   ‘She will keep on cracking the [burrawang(VEG)] nuts, she will keep putting them aside until she finishes them.’ (‘Burrawang’ o7-9)

Prolonged activities, such as ‘cracking’ and ‘putting aside’ in (30), which are normally marked with an aspectually neutral tense, can also be segmented into individual, short pieces, which are then marked with atomic aspect tenses. This is also observed by Heath for Wubuy, where he makes the following observation for the Wubuy ‘Punctual’ NP1 and P1 (1984: 340), which correspond to Enindhilyakwa ‘atomic’ NP1 and P1:13

“[T]exts often have series of repeated Punctual verb forms to describe situations in which a prolonged event is broken up into segments. A characteristic of narratives is the occurrence of certain motion verbs […] in such Punctual series, referring to a stop-and-go motion as when an actor is moving stealthily, perhaps to sneak up on or to follow another actor.”

The following passage illustrates atomic verbs describing a repetition of motion verbs. It is taken from the *Bujikeda story about a mother cat who is rescuing her kittens from a bush fire (the full story is given in Appendix A). She runs back and forth, stops to look, takes off again, and each time returns with one kitten (verbs marked for P1 are bolded, as are their English translations).

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13 Punctuality is a subtype of, and often confused with (Caudal 2005a), atomicity. Punctuality is atomicity plus non-durativity. Being devoid of proper subparts, atomic events are incompatible with English *finish* (e.g. *John finished leaving*), with the perfect progressive (e.g. #John has been leaving [the iterative interpretation is not relevant]), and with degree adverbs like completely (e.g. #John left completely [the frequentative interpretation being irrelevant]) (Caudal 2005b: 240). Some atomic events may be durative: ??The lifeguards finished saving the tourist who was drowning (Caudal 2005a: 105, ex.7a).
Comparing...

The fact that both the prefix and the suffix element contribute to mood marking can be shown by comparing (32) with further examples such as (33) and (34), where variations of morphemes in the same prefix and suffix slots mark different types of mood categories. In (33), for instance, an
irrealis prefix is combined with a non-past suffix (as opposed to a past suffix in [32]) and marks desiderative modality (expression of an intention or desire). The example in (34) shows that an irrealis prefix contrasts with a realis prefix, because the combination of a realis prefix with a \(p2\) suffix results in a non-modalised structure, basically a statement of a fact.

\[
(33) \quad ngaya \ nvngu\-ware\-na\-ma \ a\-wurru\-wurrariya \ ak\-engkirra\-ja
\]

\[
1.\text{PRO} \ 1\text{-not.want-}NP2\text{-ma} \ \text{NEUT-RDP-bad} \ \text{IRR.12a-hear-NP2}
\]

\‘I don’t want that we hear bad things’

\[
(34) \quad arakbwiyiwa \ narrv\-ma\-ngekbvra\-ma \ miyanga \ mema\-mvrra \ me\-me\-m\+eeka
\]

\[
\text{long.ago} \ 3a\text{-VEG-make-}p2\text{-ma} \ \text{VEG.firestick} \ \text{VEG.this-INSTR VEG-INALP-INALP+tree}
\]

\‘a long time ago people made firesticks with the wood of these trees (miyarrawa VEG.\text{red.kurrajong.tree})’

\[
\text{(GED p.18)}
\]

The realis category is used in the majority of non-modalised structures (statements of fact), whereas the irrealis category covers a broad range of modal meanings, including counterfactuals (open and foreclosed), and epistemic, deontic and desiderative categories. A fundamental realis-irrealis distinction is found in most non-Pama-Nyungan languages (Verstraete 2005). Enindhilyakwa differs from most languages discussed in Verstraete in having separate imperative and hortatory mood categories, encoded by formally distinct sets of prefixes.

Table 6.13 outlines the basic pattern of composite mood marking, adopting the category labels employed by Verstraete (2005: 231-2):

- **Counterfactuality**: a complex type of modality that has two components of meaning: it signals that (i) actualization of the event was potential, i.e., possible, desirable, imminent, or intended, but (ii) it did not take place in spite of this desire, possibility, or intention
- **Deontic modality**: marks the speaker’s assessment of a situation, in terms of the desirability of its occurrence (i.e., a judgement of (un)desirability)
- **Epistemic modality**: marks the speaker’s assessment of a situation, in terms of the plausibility of its truth value (i.e., a judgement of possibility)
- **Desiderative-intentional modality**: marks a clause participant’s desire or intention to realise a situation
The following examples illustrate some of the modal meanings marked by the different combinations of prefixes and suffixes.

(i) **Realis + NP1: deontic**

(35) *Ngakurruwa=dhangwa ngarrv-rrvngka-jungwa, ngarrv-mvni-yakuwerribika-jungwa*

12a.PRO=EMPH 12a-look-REFL.NP1 12a-BENE-think-REFL.NP1

*ngarnvmamalya ngarrv-miyambena.*

12a.people 12a-what.kind.of?

‘We’re the ones who should look at ourselves, who should think about what kind of people we are.’

(‘Mixed marriages’ e221-2)

(ii) **Realis + NP2: desiderative-intentional**

(36) *Ngv-ngv-lhvk-cma-ma nvg-ena? Ngy-nga-lhukwa-mvrrka-ji-na-ma nganyangwa*

1-go-NP2-ma 1-this 1-3f-track-?follow-NP2-ma 1.PRO.POSS
dhv-dharrvngka.

3f-woman

‘May I go? I want to track down my wife.’

(‘Search’ z31-2)

(iii) **Irrealis + NP2: epistemic**

(37) *Akwa ebina a-dhv-dhrrvngwarra angwalha, akina a-kw-alyelyybara, and NEUT.that.same NEUT-RDP-big NEUT.mud.crab NEUT.that NEUT-NSR-RDP.eat ak-alyvbarv-na-ma.***

IRR.12a-eat-NP2-ma

‘And those big mud crabs, they are edible, we can eat them.’

(‘Crabs’ d9-10)
Leeding 1989: 413

(v) Irrealis + p2: foreclosed epistemic counterfactual

(39) *Ebinu-wa angalya=dha ying-engkirrike-na dhukwa ka-lhvkyvlhalhv-nyrru-va=dha*

NEUT this-ALL NEUT place=TRM FEM-listen-NP2 maybe IRR COLL-call.P2-ALL=TRM

wurr-alhek-bina wurruwarda=nya wurr-ambilyvmee=ka...

COLL du-this COLL dog=TRM COLL two=EMPH

‘She was listening to where those two dogs should have been calling from (but there was nothing, the place was quiet).’

(‘Snake and Dogs’)

(vi) Irrealis + p2: desiderative-intentional

(40) *narv-ngayindha-ngv-ma kwu-alyvbarv-nv-ma akwalha a-m-adhangkwa*

NEUT want-P2-ALL IRRT.3 pl eat-P2-ALL NEUT some NEUT INALP flesh

‘they wanted to eat some meat’

(Fieldnotes, 2/12/08, DL, ML)

(vii) *nara* Irrealis + p2: deontic

(41) a. *nara=maka kvnga-mvnjirrkv-rvngka nvg-ena*

NEG=EVIT IRRT.1/3 f body see.p2 1-this

‘I wasn’t supposed to look at her’

(‘Old days’ 10)

b. *narv=maka kvni-yardha-ngv adhwaba*

NEG=EVIT IRR.3 m arrive-P2 today

‘he should not have arrived today’

(JS2 p.92)

(viii) Transitive hortative + NP2: hortative

(42) *mama env-lhvka-ja ene-ja abvyn-ngarre-na*

okay HORT 3 msg go-NP2 3 m PRO cofr HORT 3 m/3 a visit NP2

‘it’s okay, let him go and let him visit them’

(VL1 p.418)

(ix) *nara a- / ng- + NP3: deontic*

(43) *Akwiwyadhakina-manja ngarna nara ngarna ngi-yaminjama-ma.*

NEUT that kind of LOC 12 a this NEG 12 a this NEUT RDP do NP3

‘We should never do that sort of thing.’

(‘Vehicle hire’ k21)

(x) *nara ng- + NP3: epistemic*

(44) *Nara nvg-ena ayarrka-ma ng-ardharry-ma akwalya.*

NEG 1 this NEUT hand INSTR NEUT pierce NP3 FISH NEUT

‘I can’t spear fish with my hands.’

(‘Lionel’ i33)

As can be seen from these examples, many prefix and suffix combinations are ambiguous between a non-modal reading and a modal reading. For example, (37) could also mean ‘we will eat them’, and (38) ‘young girls are careful’. The intended meaning has to come from the context.

Realis and irrealis prefixes may also have an imperative or hortative reading. The transitive imperative and the hortative prefix series are only distinct with a third person object (section 4.2.2; Leeding 1989: 413-5). The prefixes of transitive imperatives with a 1st person object (e.g. *kiss me*)
are the same as the transitive realis prefix with 2\textsuperscript{nd} person subject and 1\textsuperscript{st} person object (i.e. you kiss me). Thus, the following example is ambiguous between an imperative and a non-modal meaning:

(45) Yu-kwa ngayuwa-wa mu-wilyaba.

\[ \begin{array}{ll}
\text{2/1-give.NP1} & \text{1.PRO-ALL VEG-one} \\
\end{array} \]

‘Give me one (mango(VEG))!’ OR ‘You give me one.’

(Fieldnotes, DL, CW)

The imperative reading is more likely here because of the NP1 unsuffixed stem. Intransitive hortative prefixes that do not involve third person are also the same as the corresponding realis prefixes, as shown in (46a). By contrast, the prefixes of transitive hortatives that do not involve third person are the same as the corresponding irrealis prefixes (46b).


yes 12-fight-RECP-NP2=TRM

‘Yes, let’s fight.’ OR ‘we are fighting’

(‘Seagull and Pheasant’ u39-40)


1.PRO-ABL IRR.1/2-head+hit-NP1-ABL NEUT.head-LOC

‘In my turn, let me hit you on the head.’

(‘Seagull and Pheasant’ u48)

OR: ‘I will hit you on the head.’ (OR: ‘I have to hit you on the head’; ‘I should hit you on the head’, and so on)

Murrinh-Patha is a language with a similar system of composite mood marking, where Past Irrealis is used in negated past clauses. Past Irrealis is always used in this language in conjunction with a past imperfective marker (Nordlinger & Caudal 2011), which corresponds to the Enindhilyakwa fact that the Past Irrealis can only co-occur with \([\text{p2}, \text{not p1}]\). Also in common with Enindhilyakwa, the Past Irrealis in Murrinh Patha is used outside of negation to express foreclosed past counterfactuals, comparable to (39) above. Nordlinger & Caudal note that an interesting consequence of this system is that the same construction is used to encode both negative past clauses and negative past deontic ‘should’ constructions:

(47) Marda the-na-mut-tha palngun.

\[ \begin{array}{ll}
\text{NEG} & \text{2sgS.POKE(19).PSTIRR-3msgIO-give-PIMPERF female} \\
1. & \text{‘You did not give him that girl.’} \\
2. & \text{‘You shouldn’t have given him that girl.’} \\
\end{array} \]

(Nordlinger & Caudal 2011 ex. 35)

This example is ambiguous between a reading in which the event was not realised in the past (47-1), and one in which it was realised (but shouldn’t have been) (47-2). This ambiguity has not been tested in Enindhilyakwa. The only example of a negative past deontic ‘should’ construction in my data is ‘he should not have arrived today’ in (41b). This example involves the evitative clitic \(=\text{maka} \) (Appendix M), which may be the reason for the deontic modality. It is however unclear whether this clitic is obligatory in order to express negative deontic modality. Since the systems of
composite mood marking are very similar in Enindhilyakwa and Murrinh-Patha, and based on the workings of the Enindhilyakwa system, I would suggest that the same ambiguity for negated past irrealis constructions exists in Enindhilyakwa.

In sum, many prefix and suffix combinations are ambiguous between a non-modal and a modal reading. The only combinations of prefixes and suffixes that always have a modal meaning is irrealis with p2 (counterfactual, deontic, desiderative-intentional) and imperatives and hortatives involving third person. The only combination where I encountered only non-modal meanings is realis plus p2.

6.7 The -ma ~ -mvrra suffix

Cross-cutting the TAM system we find the suffix -ma, and its less common variant -mvrra, which directly follow the tense/aspect suffixes in slot [(+4)] of the verbal template (Table 4.1 in Chapter 4). This elusive suffix has received a range of radically differing analyses in the previous work, from an imperfective aspect marker (Leeding 1989), to being “meaningless” (Heath n.d.), to a “statement of fact […] which is added to verbs in the past tense” (Stokes 1982; Reid, Stokes & Waddy 1983 Book 3, p. 9; Waddy n.d.-a). The suffix does not occur on negated verbs in the past tense (Reid, Stokes & Waddy 1983 Book 4, p.19). Waddy (n.d.-b) proposes an additional function of the suffix as a relative clause marker, and as an emphatic marker on nominals.

This range of different analyses is indicative of a rather non-trivial meaning and function of this suffix. In this section I will argue that this suffix is used in a subtle interplay with the various tenses, aspects and moods, as illustrated in Table 6.14 below. Its function is a ‘first person focalisation’ marker, which refers to the perspective through which a narrative is presented. The suffix is prevalent in texts where the narrator was either an eyewitness to the scene he describes, or where he expresses his opinion or perspective on an event, or where he is simply talking about himself. Consequently, the -ma suffix is particularly frequent with first person subjects, in first-hand accounts of events, and in elicited sentences. Environments in which the suffix is mostly absent include procedural narratives, and imperative and transitive hortative moods (e.g. ‘let him help her’). Verbs in these contexts are all directed towards the 2nd person, which is incompatible with a 1st person focalisation marker. The suffix is also rare in Dreamtime narratives, where the narrator cannot have been an eyewitness to the scene. The verb -ma- ‘do, say’, which is homophonous to the most common variant of the -ma ~ -mvrra suffix (and which is widespread in Northern Australian languages) is hypothesised to be an historical source of the suffix in section 6.7.2, whose meaning is therefore along the lines of ‘I say/think/judge’.

In the above contexts the presence of -ma ~ -mvrra suffix is semantically determined, based on the perspective through which the narrative is transmitted. However, the suffix also has a function
as a marker of negated non-past events, and of subordinate clauses (Waddy n.d.-b; sections 8.9.1 and 8.11.1). In these environments the suffix is obligatory and bleached of its meaning. In other contexts the suffix is entirely blocked, which include: (i) the if-clause of conditionals encoded by the LOC case suffix -manja, (ii) verbs marked with the purpose clitic =yadha, (iii) nominalised verbs, and (iv) the negated past. The absence of the -ma suffix will be argued to also be semantically motivated: the suffix does not appear on unrealised events.

Table 6.14 repeats the TAM system from Table 6.13 above and presents its interaction with the -ma ~ -mvrra suffix. The ‘+’ sign indicates the presence of the suffix, and parentheses mean that its presence is optional.

<table>
<thead>
<tr>
<th>Form</th>
<th>Modal meaning</th>
<th>-ma ~ -mvrra</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prefix</td>
<td>Suffix</td>
<td>Realis</td>
</tr>
<tr>
<td>Realis</td>
<td>Npast1/2</td>
<td>Non-modal meanings (statements of fact); and Occasionally Deontic, Desiderative-intentional</td>
</tr>
<tr>
<td></td>
<td>Past1/2</td>
<td>Non-modal meanings (statements of fact)</td>
</tr>
<tr>
<td>Irrealis</td>
<td>Npast1/2</td>
<td>Non-modal future; and Epistemic, Deontic, Desiderative-intentional</td>
</tr>
<tr>
<td></td>
<td>Past2</td>
<td>Counterfactual; and Deontic, Desiderative-intentional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+ Negative particle nara: Negated Past</td>
</tr>
<tr>
<td>Imperative</td>
<td>Npast1/2</td>
<td>Deontic 2nd person</td>
</tr>
<tr>
<td>Hortative</td>
<td>Npast2</td>
<td>Intransitive Hortative (e.g. let’s go)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transitive Hortative (e.g. let him kiss her)</td>
</tr>
<tr>
<td>a- / ng-</td>
<td>Npast3</td>
<td>+ Negative particle nara: Negated Npast</td>
</tr>
</tbody>
</table>

Table 6.14: Enindhilyakwa TAM system and the -ma ~ -mvrra suffix

This table shows that the -ma suffix operates partly independently from the TAM system, which will be demonstrated in more detail below.

The following two examples, taken from the same narrative, illustrate the first person focalisation function of -ma.

(48) a. *Kvni-yamv-na-manja, kenu-warde-na-manja, nungkwa-ja kv-me-na*
    €ekā kvnu-warde-na arrkalha.
    *If he does that, if he hits you, you can take a stick and hit him back.’* (‘Children’ h20-3)

b. *Ngayuwa=dhangwa yiba-ngaji-na-ma eeka-mvrra ki-yama-manja*
    arngk-ingka-manja.
    *I will hit you with a stick if you do that another time.’* (‘Children’ h26-7)

In (48a) the subject is second person, and the verbs do not take -ma. By contrast, the subject in (48b) is 1st person and the verb is marked with -ma. The presence and absence of -ma cannot be
due to differences in TAM categories: all verbs take irrealis prefixes and NP2 suffixes. The most obvious way in which the verbs differ is in their clause participants: the verbs with the -ma suffix have first person subjects, whereas the verb lacking the suffix has a 2nd person subject.

The following excerpt illustrates another effect of the first person focalisation function of -ma, which is foregrounding. The story from which it is taken is an eyewitness account of a mother cat rescuing her kittens from a bushfire (Appendix A), so we would expect the suffix to be prevalent here (cf. e.g. the example in [i] below). However, only one verb is marked with -ma in this example (which is bolded). The events described by the remaining verbs serve as a background:

(49) Yarn=dha arakba=wiya, yirrv-kalharu-kwa ena angura.
1a.this=TRM already=DSTR 1a/NEUT-burnt.off.bush-FACT.p2 NEUT.this NEUT.fire
Ena bujikeda nvngy-rvngka-ma. Yirrv-kalharu-kwa enee=ka
NEUT.this cat(NEUT) 1/NEUT-see.p2-ma 1a/NEUT-burnt.off.bush-FACT.p2 NEUT.this=EMPH
NEUT.fire VEG-big=EMPH VEG.southeast.wind VEG-run-p2
Yirrv-kalharu-kwa ena. Nvngu-wilyaka ebina bangkilya,
1a/NEUT-burnt.off.bush-FACT-p2 NEUT.this 1/NEUT-take.p1 NEUT.that tomahawk(NEUT)
akwa nvng-arjiyinga adhalyvma-manja a-kiyak-bijina. Ngalha-jee=ka angura
and 1-stand.p1 NEUT.river-LOC NEUT-river-beside NEUT.PRO-COF=EMPH NEUT.fire
NEUT.big=EMPH NEUT-?big-INC-p2 14 NEUT-burnt.off.bush-INC-p2 to.here
‘Long ago we lit a fire to burn off the bush. I was looking at a cat. We lit the fire. A big
southeast wind was blowing. We lit it. I took a tomahawk, and I went to stand beside
the river. The fire got really big. It burnt towards us.’

The use of the -ma suffix makes the narrator stand out against the general background of the fire burning and advancing. The fact that the events of taking the tomahawk and assuming a position near the river, which have a first person subject, do not take -ma, makes these part of the background - they are not relevant to the proceedings of the story.

The above examples show that the suffix is not “meaningless”, as suggested by Heath (n.d), because it has a clear distribution. The suffix is also not always added to verbs “describing a situation (stating facts)”, as proposed by Reid, Stokes & Waddy (1983), because it is absent on many verbs describing a fact, and it is present on verbs that do not express facts, such as (47b). Finally, if the suffix denoted imperfective aspect, as argued by Leeding (1989), we would expect it to occur in particular on verbs describing the background of an action. Although the suffix does occur in such environments, to be described below, the fact that it does not always do so indicates that its appearance is not aspecually conditioned.

14 The word for ‘big’ is -arvma. This finds no cognates in the Gunwinyguan languages, and it is possible that it comes from the Macassan word romba ‘fat’ (Macassan /o/ continues as /ə/ in Enindhilyakwa - see Chapter 9). The INCH -arymbvna-dhv- in this example confirms this hypothesis, as it retains the Macassan b; the na segment that follows it could then be an old tense/aspect suffix.
The following list presents the contexts in which the -ma suffix is always or nearly always present (where possible the subject in the examples is selected so as to not be first person, to illustrate that this cannot have caused the appearance of -ma).

**Contexts in which -ma ~ -mvrra is present**

(i) First-hand eyewitness accounts (common but optional)

(50)  

_Nvng-enanvngi-yengbi-na-ma mema-lhangwa adhuwaba dvrraka_  
1-this 1-speak-NP2-ma VEG.that-ABL today truck(VEG)  
_ngakurra-lhangwa-lhangwa ngarnvnamalalya-lhangwa Toyota-lhangwa, meno_  
12a.people-POSS T.-ABL because  
_warnvnamalalya narrv-ma-kwa-ma mani. Nvmy-lhvke-nv-ma narrami-lyilya-ngv-ma_  
3a.people 3a-VEG-give.P2-ma money(NEUT) VEG-go-P2-ma VEG/3a-take-P2-ma  
_Friday engkawiya vmba Saturday […] nvm-ambilyv-ma awilyaba-manja._  
F. last but S. VEG-stay.P2-ma NEUT.one-LOC  
‘I am talking today about this truck of ours, about this Toyota that belongs to us, because people have paid money for it. It went and took them last Friday but on Saturday […] it stayed in one place.’  
(‘Vehicle hire’ k1-6)

(ii) Expressions of opinions or sentiments (common but optional)

(51)  

_Ngamanja dhukwa kvnu-werrinengekburaka-jungu-ma, kvn-ambarri-ya-mvrra._  
where maybe IRR.3m-chest-make-REFL.NP1-ma IRR.3m-sit-NP1-ma  
kvnv-rvng-merraka-jungu-ma angamba-manja angalya?  
IRR.3m-house-?settle-REFL.NP1-ma where-LOC NEUT.place  
(Narrator is expressing his disapproval of Aboriginal people marrying white people:) ‘[I ask you:] Where might he become happy, might he sit down, in which place might he settle?’  
(‘Mixed Marriages’ e166-8)

(iii) Relative clauses (obligatory)

(52)  

a. _Ngarra-makv-na-ma nv-lhvke-nv-mvrrv-lhangwa y-arvma_  
1a/2-tell-NP2-ma MASC-go-P2-ma-ABL MASC-big  
‘we are telling you about the giant who came [from the mainland]’  
(VL1 p.313)  

b. _Nvng-akuma-rna amawalyuwa ebina-manja angalya na-jungu-na-mvrrv-manja._  
1/NEUT-put-P2 NEUT.flowers NEUT.that-LOC NEUT.place COLL-die.P2-ma-LOC  
‘I put flowers on the place where it [wurrajija ‘COLL.bird’] died.’ (Fieldnotes DL 1/12/08)

(iv) Subordinate clauses (except conditional if clauses) (obligatory)

(53)  

a. _nenv-rvngandha-ngv-nv-lhangwa nuw-awurikye-yi-na wurr-ababvnrnv-lhangwa_  
3a/MASC-cut-P2-ma-ABL 3a-share-RECP-P2 3a-many-POSS  
‘after they had cut up the turtle, they shared it with everyone’  
(GED p.172)  

b. _Wurri-yukwayuwa nara a-wardvy-ma y-akina meno_  
3a-small.PL NEG NEGPNP-hit-NP3 MASC-that because  
karrak-akbvrrangv-mv=baba angunya.  
IRR.NEUT/3a-find.NP1-ma=REAS NEUT.boil  
‘Children mustn’t hit them [yinvkarrbiyama ‘MASC.caterpillar’] for they will get boils.’  
(GED p.103)
Negated non-past (-\textit{ma} only, obligatory, labelled NP3)

(54) \textit{Y-akina yingarna nu-warde-na-manja yinungungwangba nara ng-angy-ma} \textit{Yakina yingarna tamedown animal that not-kill-LOC animal that not-eat-LOC.}

‘When a snake kills an animal it doesn’t bite it into little pieces, it doesn’t eat like dogs do…’

(‘Snake and Dogs’)
(vi) Imperative mood

(56) yamv-na adhuwaba
IMP.2-do-NP2 today
‘do it today!’

(vii) Transitive hortative mood

(57) angv-ny-ngaji-na enuwa-manja
HORT.3f-3m-hit-NP2 3m.PRO-LOC
‘let her hit him’

(viii) Procedural narratives

(58) Ambaka k-ambilharry-na yandhihangwa yelyukwa kvnv-liharry-na. Kembirra
later IRR.2-wait-NP2 until MASC.rain IRR.MASC-fall-NP2 then
kv-me-na nungku-lhangwa dhvrrabada akwa nungkuwa kv-lihvka-ja
IRR.2/NEUT-take-NP2 2.PRO-POSS spear(NEUT) and 2.PRO IRR.2-go-NP2
VEG.beach-ALL 2.PRO IRR.2-go-NP2 VEG.sea-ALL and IRR.2-wait-NP2 over.there
Kvn-rrvngkv-na-manja nungkuwa y-akina yimadhuwaya, nungkuwa
IRR.2/MASC-see-NP2-LOC 2.PRO MASC.stingray 2.PRO
kvn-ardhvyre-na env-lhangwa-manja yi-nv-m+adhangkwa.
IRR.2/MASC-stab-NP2 3m.PRO-POSS-LOC MASC.m-INALP+flesh
‘You wait until it starts to rain. Then you take your spears and you go to the beach. You
walk into the water and you wait. When you see a stingray, you stab its round body.’

(‘How to catch stingray’ DL 28/11/08)

(ix) Dreamtime narratives

(59) Y-akinee=ka ni-yengbi-na Yirvmba makarda-lhangwa. Ene-ja
MASC-that=EMPH MASC-speak-P2 MASC.seagull VEG.sea-ABL MASC.PRO-COfR
Yikba ni-yengbi-na ariba-lhangwa. Neni-bee-yi-na kembirra
MASC.pheasant MASC-speak-P2 NEUT.land-ABL 3mdu-argue-RECP-P2 then
awinyamba...
NEUT.anger
‘Seagull spoke from the sea. Pheasant spoke from the land. Then they started quarrelling…’

(‘Seagull and Pheasant’ u1-3)

(x) Protasis of conditionals marked with LOC case -manja (always absent)

(60) Ki-yama-manja, yib-akbyrranga-manja nvgk-ena, yiba-ngaji-na-ma
IRR.1-do.NP1-LOC IRR.1/2-find.NP1-LOC 2-this IRR.1/2-hit-NP2-ma
‘If I do, if I catch you, I’ll hit you (back)’

(‘Children’ h30-2)

(xi) Preceding PURP clitic =yadha (always absent)

(61) kvma-ngamba-ji-ni=yadha kv-ma-lyingirrare-ji-ni=yadha
IRR.1/VEG-bathe-CAUS-NP2=PURP IRR.1-VEG-crush-NP2=PURP
‘(Let me go and see if the burrawang nuts(VEG) are ready) for me to soak them, for me to
crush them’

(‘Burrawang’ o19-20)
Nominalised (non-finite) verbs (always absent)

(62) \( Nara \) \( y \)-ibina \( yikarba \) \( nvng \)-\( enu \)-\( kw \)-\( arndaka \).
NEG MASC-\( that \).unseen MASC.\( woomera \) 1-m-NSR-\( fish \)
‘There’s no woomera for me to fish.’

(63) \( nara \) \( yikv \)-\( n \)-\( andheeya \) \( yirr \)-\( aja \)
NEG IRR.1a-3m-\( see \).P2 1a.PRO-\( CoFR \)
‘we could not see him / we did not see him’

The -\( ma \) ~ -\( mvrra \) suffix may be absent in these contexts for a number of reasons. For the (vi) imperative mood, (vii) hortative mood, (viii) procedural narratives and (ix) Dreamtime narratives, it is absent for semantic reasons: imperatives, hortatives and procedurals are directed towards the 2\textsuperscript{nd} person, not the 1\textsuperscript{st} person, and Dreamtime stories involve third person participants. Moreover, the narrator cannot have been an eyewitness to the Dreamtime events that (s)he describes, which also blocks the appearance of -\( ma \). These semantic factors can, however, not account for the absence of the suffix in the remaining environments, because here the subject is 1\textsuperscript{st} person but the verbs occur without -\( ma \) (note that the absence of -\( ma \) preceding the LOC suffix -\( manja \) on conditionals cannot be for phonological reasons such as haplology, which would block *-\( ma \)-\( manja \). This is because the suffix obligatorily occurs in relative clauses marked with -\( manja \), though in its longer version, as in [52b] above).

An answer as to the absence of the -\( ma \) suffix in these contexts may lie in the fact that they all involve unrealised events or states of affairs. The protasis or if\' clause of a conditional (x) expresses a hypothetical event in the future. The purposive clitic =\( yadha \) (xi) and nominalised verbs (xii) both signal an intention or desire to realise an event. The negated past (xiii) describes an event in the past that did not take place. The absence of -\( ma \) in these contexts of unrealised actions could suggest that it is some sort of realis marker (cf. Stokes’ [1982] and Reid, Stokes & Waddy’s [1983] “statement of a fact”).

However, the -\( ma \) suffix is fully compatible with irrealis prefixes, as shown in the following examples, ruling out an analysis as a realis marker.

(64) a. \( Awilyaba \) \( kv-lhvke-nv-ma \), \( dh-akvna \) \( kvnga-ma-ngy-mvrra \) kembirra arakba
only IRR.1-\( go \)-P2-\( ma \) 3f-\( that \) IRR.1/3f-\( take \)-P2-\( ma \) then compl.act
\( ki-yengbi-nv-ma \) ngayuwa.
IRR.1-\( speak \)-P2-\( ma \) 1.PRO
‘Only had I gone, had I married her, then I could have spoken to her [but I didn’t].’

‘Old days’ (f11-3)
b. *kv-lhya-ja-* *nvngk-en* *mardvdarra-manja* *kv-karri-jungu-na-* *ma*

IRR.2-go-NP2-ma 2-this VEG.heat.of.sun-LOC IRR.2-roast.in.ashes-REFL-NP2-ma

*mardvdarra-manja* akwa *kv-ku-kunu-murrrkulha-* *ma* *nvngk-akina*

VEG.heat.of.sun-LOC and IRR.2-RDP-body-loc.down.NP2-ma 2-that

‘you should go in the hot sun and you should put hot sand on yourself and you should keep lying down’

(‘Yininya’ m8-10)

In these irrealis contexts the suffix again functions as a first person focalisation marker: in (64a), the speaker is focussing on himself, talking about the things that could have happened to him. The example in (64b) signals deontic mood, and the narrator tell us what he thinks the hearer should do in the event that (s)he is stung by a *yininya* ‘MASC.bristle worm’. This example differs from the procedural narrative in (58) above, which also combines irrealis prefixes with NP2 suffixes, but where the verbs lack -ma: the latter is a neutral description of the procedure to follow when catching a stingray, whereas the former is a more subjective prescription of what to do when you are stung by a bristle worm according to the speaker.

The presence of the -ma suffix in the counterfactual conditiona ‘had I married her...’ in (64a), but not in the conditional ‘if I catch you...’ in (60), then, could be related to how certain the speaker considers the realisation of the event to be. That is, in (64a) the speaker knows with certainty that the events could have been realised in the past, because such is the law: only if you marry a lady you can speak to her. In the conditional in (60), on the other hand, the event is purely hypothetical: ‘in case I catch you, then...’. Note that -ma occurs on the verb in the apodosis (the main clause) in this example, which expresses that the consequence of the hypothetical event is fairly certain (i.e., in case I catch you, I will surely hit you).

The hypothesis that the occurrence of -ma requires the speaker to believe that realisation of the event is certain, is supported by the following two (elicited) examples.

(65) a. *dh-akina* *kemba* *kvngi-ngembe-na-* *ma* *awuruku-manja*

3f-that then IRR.3f-bathe-NP2-ma NEUT.billabong-LOC

‘she will swim in the billabong’ (anin2_pw_au_004)

b. *dhukwa* *kv-ngembe-* *na* *dh-akina* *awuruku-manja*

maybe IRR.3f-bathe-NP2 3f-that NEUT.billabong-LOC

‘she may swim in the billabong’ (anin2_pw_au_004)

The verb in (65a) takes -ma and expresses a certain event in the future, whereas in (65b) this event is not considered as certain, and the verb lacks -ma. Indeed, the -ma suffix is mostly incompatible with *dhukwa* ‘maybe’, as shown again in (66a). In (66b), on the other hand, *dhukwa* is accompanied by a -ma suffix on the verb, but here the speaker is fairly certain about the ‘hypothetical’ event.
(66) a. *dhukwa kynt-ya ngalhanga dh-adhv-m-ikirra*
   maybe  IRR.3m-forget-NP1 3f.PRO.Poss 3f-f-INALP-name
   ‘he may forget her name’ (anin2_pw_au_004)
   b. *dhukwa ni-yakwabija-ma ngalhanga dh-adhv-m-ikirra*
   maybe  3m-forget.P1-ma 3f.PRO.Poss 3f-f-INALP-name
   ‘he probably forgot her name’ (anin2_pw_au_004)

The absence of the -ma suffix on verbs marked with the PURP clitic (xi) and on nominalised verbs (xii), which both express intension or desire, could be for similar reasons: the event is considered to be hypothetical by the speaker, and thus is not marked with -ma. The absence of the suffix in the negated past (xiii) may also be semantically motivated: a speaker cannot have witnessed an event in the past that did not happen. So, whereas the speaker is certain of the chasing event in the following example, which (s)he may even have witnessed, the catching event is hypothetical because it is unrealised - as also indicated by the irrealis prefix that always occurs in the negated past.

(67) *narrvngv-nv-lharrma-ngv-nvrra nv-mawuru-wa akema nara ngawa*
   3fd-3m-chase-P2-ma 3m-moon-ALL but NEG cont.act
   *karrvngv-n-akbvvrtanga-rna*
   IRR.3fd-3m-find-P2
   ‘the two women were chasing Moon, but they could not catch him’ (VL1 p.497)

Speakers very frequently use the -ma suffix in elicited sentences (e.g. [65a] and [66b]), but they often also approve of the sentence when the suffix is omitted. Thus, when uttering a proposition p, speakers often say ‘p-ma’ (i.e., ‘I say/think/judge that p’). This may be the reason why Heath (n.d.), whose only source of data was elicitation sessions, concluded that verbs with the -ma suffix are more common than without, and that the suffix is meaningless. However, from the textual data we have seen that the distribution of -ma obeys a pattern and it does have meaning.

A final observation regarding the suffix’s distribution is that it is more common on verbs describing durative atelic events than on atomic changes-of-state, irrespective of whether these express the perception of the speaker or not. This is illustrated in (68) and (69), where the atomic events follow a series of prolonged durative events. The atomic event descriptions are bolded.

(68) *Nangkarrv-nv-mvrru…wa, nv-kuwabijanga eeka-manja*
   3m-run-P2-ma…XTD 3m-jump.P1 NEUT.tree-LOC
   ‘He kept on running until he jumped behind a tree.’ (= [20b])

(69) *Kvngv-ma-lyangmi-lyang+bajde-na-ma ma-m+adhankwa m-akina,*
   IRR.3f-VEG-RDP-head+hit-NP2-ma VEG-INALP+flesh VEG-that
   *kvngv-m-akakumv-rna-ma bi…ya kvngv-ma-jerrukwa,*
   IRR.3f-VEG-RDP.put-NP2-ma and…XTD IRR.3f-VEG-finish.NP1
   ‘She will keep on cracking the [burrawang(VEG)] nuts, she will keep putting them aside until she finishes them.’ (= [30])
The sequence of durative events is marked with -ma or -mvrra, whereas the instantaneous event that marks the end of the sequence is not. Such examples may have led Leeding (1989) to believe that the -ma suffix represents imperfective aspect. However, this suffix is perfectly compatible with perfective NP1 and P1 suffixes that mark atomic changes-of-state, as in several examples above, and the following.

(70) *Kembirra* nvm-awiyebenv-ma mamawura. *Kembirra* yirrv-mungkulhunga-mvrra then VEG-enter-p2-ma VEG.sun then 1a-sleep.p1-ma marrvnga.

VEG.sleep

‘Then the sun set. Then we fell asleep.’

(‘Mvrungkurra’ p28-9)

I propose that this skewed distribution follows from the hypothesis that the suffix is used by speakers to express their perceptions. Complements of perceptions are often imperfectives or statives, because one is seeing/smelling/hearing something as it is happening. The narrator only specifically marks the durative (i.e. “imperfective”) events as his perceptions, and thus contrasts them with the instantaneous changes-of-state. The aspectually neutral NP2 and P2 suffixes cover imperfective aspect, so it is those that are most frequently accompanied by the -ma suffix.

6.7.1 -ma or -mvrra?

The -ma suffix freely varies with -mvrra, although the former is much more common. The choice between the two also seems to be a matter of personal preference, as one of my informants (PW) used the -mvrra variant more frequently than others (e.g. DL). Furthermore, the -mvrra variant may have a slight tendency to appear sentence-finally:

(71) *Yingv*-m-adhabadjanv-ma ying-alybarv-nv-ma anhynge dh-akina

3f-VEG-crush-p2-ma 3f-eat-p2-ma NEUT.food 3f-that

*yingv*-m-adhabadjanv-mvrra.

3f-VEG-crush-p2-ma

‘She crushed them [*marruwayija*(VEG) nuts] and ate them and kept on crushing them’

(Akarrikarra 1990, vol.10)

In other environments the choice is phonologically conditioned: preceding the LOC case suffix -manja and the ALL case suffix -wa, only the -mvrra variant appears:

(72) a. *Nvng*-ambilya nuw-ambilyv-mvrrv-manja.

1-stay.p2 3a-stay.p2-ma-LOC

‘I stayed where they were staying.’

(JS2 p.98)

b. *Nvng*-andheeya arakba ebinu-wa angalya n-ingkilharrv-mvrru-wa.

1-look.NP2 compl.act NEUT.that-ALL NEUT.place MASC-fall.P1-ma-ALL

‘I look at the place where it has fallen.’

(Fieldnotes, EM, December 2008)

What we see here may be an inverse haplology rule: the long version of the suffix is used to avoid
two syllables starting with a sonorant with the same place of articulation: i.e. *-mv-manja and
*-mu-wa are out, while -mv-lhangwa in (53a), -mv=baba in (53b), et cetera, are allowed.

6.7.2 Etymology of -ma ~ -mvrra

The -ma ~ -mvrra suffix is highly polysemous. The following meanings are attested:

1) first person focalisation marker (section 6.7)
2) subordinate clause marker (sections 8.9.1, 8.11.1)
3) negated non-past (NP) inflectional suffix (-ma only, section 6.7)
4) instrumental case suffix (section 8.4)
5) proprietive/privative case suffix (section 8.4)

One major question is whether these meanings and function represent the same suffix, or whether
the polysemy of -ma ~ -mvrra is due to syncretism.

Above I suggested that the -ma suffix might have developed from the verb -ma- ‘do, say’. This
could account for its first person focalisation function and proposed meaning of ‘I
say/think/feel/…’. The -ma- ‘do, say’ root is common in the Gunwinyguan languages (and
elsewhere in Australia) and is reconstructed as *-ma- ‘do, say’ for proto-Gunwinyguan (Alpher,
Evans & Harvey 2003). In some Gunwinyguan languages the non-past (NP) and past imperfective
(PI) forms involve /ɻ/: for example, the NP and PI forms in Ngandi are -ma-rang and -mi-ri,
respectively, and the PI in Mangarayi is -ma-ri (ibid p.333). It is possible that the tap in the -mvrra
variant in Enindhilyakwa relates to this retroflex.

Another possible candidate for the source of the -ma ~ -mvrra suffix discussed here are the
INSTR and PROP/PRIV case suffixes (section 8.4), which are homophonous with the -ma ~ -mvrra
suffix. Heath (1978b: 78) suggests that the Enindhilyakwa INSTR ~ PROP/PRIV case suffix has
diffused from Ritharrngu PROP -mirri, and that it entered the language via the Wubuy INSTR -mirri.
Presumably the -mvrra suffix shortened to -ma in Enindhilyakwa. A possible historical
development of the first person focalisation marker could then be via the INSTR ~ PROP/PRIV suffix
(‘I am with P’) to ‘I say/think/feel P’.

Interestingly, Heath (1978b: 79) notes that the Yolngu suffix -mirri also shows up in verbal
morphology: here it is the present and future form of the REFL/RECP suffix -mi- (PRES/FUT: -mi-rrri).
In short, Heath proposes that the REFL/RECP suffix derives from the PROP suffix -mirri that also
occurs on nominalised verbs in Yolngu (e.g. waani-na-mirri [go-NSR-PROP] ‘having going’, i.e.
capable of walking, not crippled’. The *VERB-na-mirri construction was reinterpreted as a verbal
form: e.g. ‘having-hitting’ > ‘they are having-hitting’ > ‘they are fighting’. The verbal paradigm
was remodelled on that found in other verb classes. All of this presupposes very considerable time
depth (Heath 1978b: 79). The similarities between the Enindhilyakwa and the Yolngu suffix, in
form and distribution, also suggest a considerable time depth for the Enindhilyakwa suffix, and possibly a relationship with the Yolngu suffix.

6.8 Summary

The Enindhilyakwa TAM system consists of six main conjugational classes, characterised by formally distinct pairs of non-past and past suffixes. The tense suffixes simultaneously encode aspect: the NP2 and P2 suffixes are aspectually neutral, whereas the NP1 and P1 tense suffixes describe an event as atomic - that is, as telic, instantaneous and without proper subparts. Aspect is neutralised in the negated past, and a separate NP3 suffix is used for the negated non-past.

Mood is encoded through a combination of prefixes and suffixes. For example, a judgment of (un)desirability (deontic mood) may be expressed by combining realis prefixes and non-past suffixes. A consequence of this composite system is that many prefix and suffix combinations are ambiguous between a non-modal and a modal reading (as is the case for many other non-Pama-Nyungan languages with systems of composite mood marking). The intended meaning has to come from the context.

Irrealis prefixes combined with P2 suffixes are used in negated past clauses (combined with negative particle nara), and to express foreclosed past counterfactuals. This could mean that the same construction is used for negated past events (‘I didn’t…’) and for negative past deontic constructions (‘I shouldn’t have…’), as happens in for instance Murrinh-Patha - though this ambiguity has not been tested for Enindhilyakwa.

The very common but elusive -ma ~ -mvr̥a suffix that follows the tense/aspect inflection was argued to be a first person focalisation marker. It is used when the speakers wants to convey that a proposition is his or her observation, perception, opinion, and so on. Consequently, the suffix is particularly common (but optional) with first person subjects or objects, in narratives where the speaker was an eyewitness to the scene he or she describes, and in elicited sentences. This suffix is obligatory in the negated non-past and on the verb in a subordinate clause. Here the suffix is bleached of its meaning. The suffix is blocked in conditional subordinate clauses marked by LOC case -manja, on nominalised verbs, on verbs marked with the PURP clitic =yadha, and in the negated past - all of which express unrealised events.