

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’ (anin2_pw_au_004)
- b. *akina akwalya na-jungu-nv-ma*
 NEUT.that NEUT.fish NEUT-die-P2-*ma*
 ‘the fish was dying’ (anin2_pw_au_004)
- (2) a. *dhukwa kv-mvdhilyakba*
 maybe IRR.1-cough.NP1
 ‘I might cough (one cough)’ (anin2_pw_au_004)
- b. *dhukwa kv-mvdhv-mvdhilyakbv-na*
 maybe IRR.1-RDP-cough-NP2
 ‘I might cough (many coughs)’ (anin2_pw_au_004)

- (3) a. *nara kv-mvdhilyakbv-na*
 NEG IRR.1-cough-P2
 ‘I did not cough’ (ainin2_pw_au_004)
- b. *nara ngv-mvdhilyakbv-ma*
 NEG NEGNP-cough-NP3
 ‘I will not cough’ OR ‘I am not coughing’ (ainin2_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-engkvrivki-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-na(-ma)*
 tomorrow IRR.MASC-fall-NP2(-*ma*)
 ‘tomorrow it will rain’ (Lit: ‘it [*yelyukwa* ‘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* [ə] 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.

	Past		Non-past			
Positive	Realis Past1	Irrealis Past2	Realis Npast1	Irrealis Npast1	Imperative Npast1	Hortative Npast1
	Realis Past2		Realis Npast2	Irrealis Npast2	Imperative Npast2	Hortative Npast2
Neg.	<i>nara</i> Irrealis Past2		<i>nara</i> <i>a- / ng-</i> Npast3			

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:

Nvng-engkvrrvka arakba nuw-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

biya kvnu-wardu-wardemi-na n-akina, nganja k-engkvrrvki-ya kembra=dha
 and IRR.3m-RDP-cry.out-NP2 3m-that 1.PRO.CofR IRR.1-hear-NP1 then=TRM
 ‘he will keep on crying out, and then I will hear [him]’ (‘Yabungurra’ 18-9)

c. Irrealis + P2

dh-akvna kvnga-ma-ngv-mvrra kembirra arakba ki-yengbi-nv-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-lhyka-ja kajungwa kvnv-rrvngkv-ni=yadha 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-ena 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 irrealis 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

	1	2	3	4	5	6
NP1	-Ø	-ya	-ya	-Ø	-ya	-nga-Ø ~ -ya
NP2	-na / -rna	-na	-ja	-na	-na	-Ø ~ -na
NP3	-ma (? ~ -ngvma)	-ma	-ma ~ -ngvma	-ma ~ -ngvma	-ma	-ma ~ -ngvma
P1	-Ø	-Ø ~ -nga	-Ø	-Ø	-Ø	-nga-Ø
P2	-rnv / -nv	-ngv	-rnv ~ -nv	-Ø	-wa	-Ø ~ -nv

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 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. *-engkvrrvka* 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 [ə ~ ʊ].

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 \emptyset 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 stem forms of the root *-dhida-* ‘shut’ (Table 6.6 below) are: NP1 *-dhidi-ya*, NP2 *-dhide-na*, P1 *-dhidv-nga*; P2 *-dhida-ngv*; CAUS *-dhidi-ji-*. We could account for this by setting up suffix base forms like *-iya*, *-ena*, *-vnga*, 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. /jɛŋpi-nə-wa/ ‘speak-P2-ALL’ is phonetically [jɛŋpinuwa] (since there is no variation this is represented as *-yengbi-nu-wa* in the orthography). When followed by a bilabial consonant /ə/ may obtain some rounding and vary with [ɔ] (vowel rounding and backing rule P-8): e.g. /jɛŋpi-nə-ma/ ‘speak-P2-ma’ varies between [jɛŋpinəma] and [jɛŋpinɔma] (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. /jɛŋpi-nə=jaṭa/ ‘speak-P2=PURP’ [jɛŋpinijaṭa] (orthographically: *-yengbi-ni=yadha*).

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: /jɛŋpi-na/) or P2 (underlying: /jɛŋpi-nə/). This underlying difference only shows up when followed by another suffix: NP2 *-yengbi-na-ma* [jɛŋpinama] vs. P2 *-yengbi-nv-ma* [jɛŋpinəma ~ jɛŋpinɔma].³ 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 $-\emptyset$, 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/, /ə/, 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.

	Suffix	1A(i): <i>-errikbi-</i> ‘throw’ C _[-nasal] V ₊	1A(ii): <i>-mebi-</i> ‘sing’ Ci ₊	1A(iii): <i>-bijangv-</i> ‘jump’ C _[+nasal] V ₊	1A(iv): <i>-ngambe-</i> ‘bathe’ Ce ₊	1A(v): <i>-jungwV-</i> ‘REFL, die’ C ^w V ₊	1A(vi): <i>-lharr-</i> ‘fall’ C ₊
NP1	$-\emptyset$	<i>-errikbv-\emptyset</i>	<i>-mebv-\emptyset</i>	<i>-bijangv-\emptyset</i>	<i>-ngambv-\emptyset</i>	<i>-jungu-\emptyset ~ -jungwa-\emptyset</i>	<i>-lharr-\emptyset</i>
NP2	<i>-na</i>	<i>-errikbi-na</i>	<i>-mebi-na</i>	<i>-bijangv-na</i>	<i>-ngambe-na</i>	<i>-jungu-na</i>	<i>-lharr-na</i>
NP3	<i>-ma</i>	<i>-errikbv- ma</i>	<i>-mebv- ma</i>	<i>-bijangv- ma</i>	<i>-ngambv- ma</i>	<i>-jungu- ma</i>	<i>-lharr- ma</i>
P1	$-\emptyset$	<i>-errikbv-\emptyset</i>	<i>-mebv-\emptyset</i>	<i>-bijangv-\emptyset</i>	<i>-ngambv-\emptyset</i>	<i>-jungwa-\emptyset ~ -jingu-\emptyset</i>	<i>-lharr-\emptyset</i>
P2	<i>-nv</i>	<i>-errikbi-nv</i>	<i>-mebi-nv</i>	<i>-bijangv-nv</i>	<i>-ngambe-nv</i>	<i>-jungu-nv</i>	<i>-lharr-nv</i>
REFL	<i>-jungwV-</i>	<i>-errikbi- jungwV-</i>	<i>(rarrka- jungwV-)</i>	<i>-bijanga- jungwV-</i>	<i>-ngamba- jungwV-</i>	<i>-jungwa- jungwV-</i>	<i>-lharr- jungwV-</i>
RECP	<i>-yi-</i>	<i>-errikbee-yi-</i>	<i>-mebee-yi-</i>	<i>-bijangee-yi-</i>	<i>-ngambee-yi-</i>	<i>-jungwee-yi-</i>	<i>-lharree-yi-</i>
CAUS	<i>-ji-</i>	<i>-errikbi-ji-</i>	<i>-meba-ji-</i>	<i>-bijanga-ji-</i>	<i>-ngamba-ji-</i>	<i>-jungwa-ji-</i>	<i>-lharr-ji-</i>

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

In subclass 1A(i) the stem-final vowel is either /i/ or /ə/. 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 /ə/, 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 /ɛ/, 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 /ə/ 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 [ɛrikpa] when not followed by a suffix, but [ɛrikpəma ~ erikpoma] 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):

<p>(6) <u>Class 1A(i)</u></p> <p><i>-dhv-</i> ‘INCH’ <i>-yi-</i> ‘RECP’ Thematic +<i>bi-</i> (e.g. <i>-yeng+bi-</i> ‘speak’ <i>-errik+bi-</i> ‘throw’ <i>-errek+bi-</i> ‘vomit’) Thematic +<i>bv-</i> (e.g. <i>-mvdhilyak+bv-</i> ‘cough’ <i>-rak+bv-</i> ‘blow didgeridoo’ <i>-dharr+bv-</i> ‘move away’) Thematic +<i>lhv-</i> (e.g. <i>-lhaku+lhv-</i> ‘be joined together’ <i>-abv+lhv-</i> ‘be mixed’)</p>	<p><u>Class 1A(ii) (5 roots)</u></p> <p><i>-mebi-</i> ‘sing’ <i>-beki-</i> ‘drink’ <i>-marngki-</i> ‘laugh’⁴ <i>-ngwanji-</i> ‘stop’ <i>-rarrki-</i> ‘be ready’</p>	<p><u>Class 1A(iii)</u></p> <p><i>-akbijangv-</i> ‘jump’ Thematic +<i>mv-</i> (e.g. <i>-lhakar+mv-</i> ‘choke’ <i>-rerr+mv-</i> ‘become dry’ <i>-ngaruku+mv-</i> ‘fish by line’ <i>-nyirr+mv-</i> ‘blow nose’) Thematic +<i>mi-</i> (e.g. <i>-warde+mi-</i> ‘cry out’ <i>-dhvrreng+mi-</i> ‘explode’ <i>-edhvrre+mi-</i> ‘deny’) <i>+arrngv-</i> ‘bend’ <i>+barrngv-</i> ‘be heavy’</p>
<p><u>Class 1A(iv) (19 roots)</u></p> <p><i>-ngambe-</i> ‘bathe’ <i>-awiyebe-</i> ‘enter, wear’ <i>-wilyake-</i> ‘spin, go around’ <i>-lyingkwe-</i> ‘spread’ <i>-angmardhe-</i> ‘hate’</p>	<p><u>Class 1A(v) (5 roots)</u></p> <p><i>-jungwV-</i> ‘REFL, die’ <i>-walyuwV-</i> ‘be/come ripe’ <i>-rnjirrkwV-</i> ‘move’ <i>-ajabangwV-</i> ‘creep’ <i>-ebirrangwV-</i> ‘defecate’</p>	<p><u>Class 1A(vi) (6 roots)</u></p> <p><i>-lharr-</i> ‘fall’ <i>-angkarr-</i> ‘run’ <i>-alyvbar-</i>⁵ ‘eat’ <i>-warr-</i> ‘move’ <i>+barr-</i> ‘split’</p>

⁴ The dictionary lists the CAUS form of this verb as *-marngka-ji-* ~ *-marngki-ji-* ‘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 *-arnv*, *-arnv* in her analysis. However, the nominalised form of this verb in the Waddy Dictionary is *a-kw-alyelyvbara* ‘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: [aɬəpaɪəna ~ aɬəpaɪna]. Leeding presumably only heard [aɬəpaɪna] 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).

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

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

Three complex stems are composed of this thematic:

- (7) *-mvndhvrru+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.

	Suffixes	1B(ii-a): + <i>wa-</i> (e.g. <i>-yu+wa-</i> ‘follow’)	1B(ii-b): <i>-arrka-</i> ‘pull’
NP1	-Ø	<i>-yu+wa-Ø</i>	<i>-arrkv-Ø</i>
NP2	<i>-rna ~ -na</i>	<i>-yu+wa-rna</i>	<i>-arrkv-rna ~ -arrkv-na</i>
NP3	<i>-ma (~ -ngvma)</i>	<i>-yu+wa-ma ~ -yu+wa-ngvma</i>	<i>-arrkv-ma ~ -arrka-ma</i>
P1	-Ø	<i>-yu+wa-Ø</i>	<i>-arrka-Ø ~ -arrkv-Ø</i>
P2	<i>-rnv</i>	<i>-yu+wa-rnv</i>	<i>-arrka-rnv</i>
REFL	<i>-jungwV-</i>	<i>-yu+wa-jungwV-</i>	? <i>-arrka-jungwV-</i>
RECP	<i>-yi-</i>	<i>-yu+wee-yi-</i>	? <i>-arrkee-yi-</i>
CAUS	<i>-ji-</i>	<i>-yu+wa-ji-</i>	? <i>-arrka-ji-</i>

Table 6.5: Conjugation 1B(ii): *-rna ~ -na, -rnv*

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 [ə], 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’
-bvrru+wa- ‘crawl’)

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

-akbvrranga- ‘find’
-yaka- ‘take away from’
+arrnga- ‘break, split, bend’
-arrka- ‘pull’
-akuma- ‘put’
-lhvmakba- ‘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 *-akbvrranga-* ‘find’ varies between *-akbvrrangee-yi-* and *-akbvrranga-nja-*. In Chapter 9 I will argue that the latter aberrant form is a remnant of the proto-Gunwinyguan RECP form **-nyji-*.

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

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	-dhidv-ma
P1	-Ø ~ -nga	-mv-Ø	-dhidv-Ø ~ -dhidv-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)	Class 2B		
-ma- ‘get’	+dha- ‘thematic’	-jira-	‘push’
Thematic +ma-	+bvrra- ‘hit’	-arndvrra-	‘criticise’
(e.g. -wurv+ma- ‘rise, fly away’	-ridha- ‘chop’	+badja-	‘hit, punch’
-lharr+ma- ‘chase’	-warda- ‘hit’	-rija-	‘scrape’
-yirr+ma- ‘swim’)	-wurda- ‘climb’	-arda-	‘yell’
-lhawulhawa- ‘be stretched out’	-kura- ‘pull in fish’	-arrikarra-	‘write’
	-aya- ‘be upright’	-wurra-	‘throw’

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*, *-rnv* ~ *-nv* [JH class 8H (*-aja*, *-arn* ~ *-en*); JW *-aja*, *-ena* ~ *-arna*; VL class 2C (*-atja*, *-a(r)ni*)]

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.

	Suffixes	3: <i>-lhvka-</i> ‘go’ C _[coronal] a] ⁺
NP1	<i>-ya</i>	<i>-lhvki-ya</i>
NP2	<i>-ja</i>	<i>-lhvka-ja</i>
NP3	<i>-ma ~ -ngvma</i>	<i>-lhvkv-ma ~ -lhvka-ngvma</i>
P1	<i>-Ø</i>	<i>-lhvka-Ø</i>
P2	<i>-rnv ~ -nv</i>	<i>-lhvka-rnv ~ -lhvke-nv</i>
REFL	<i>-jungwV-</i>	<i>(-lhaba-jungwV-)</i>
RECP	<i>-yi-</i>	<i>-lhvkee-yi-</i>
CAUS	<i>-ji-</i>	<i>-lhvka-ji-</i>

Table 6.7: Conjugation 3: *-ja*, *-rnv ~ -nv* (verb stems ending in /a/)

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)

Thematic <i>+ka-</i> (e.g. <i>-lhawurr+ka-</i> ‘taste, try, test’ <i>-arnda+ka-</i> ‘hunt’ <i>-wal+ka-</i> ‘sneak up on’ <i>-lharr+ka-</i> ‘send’ <i>-ngurr+kwa-</i> ‘hunt’)	Thematic <i>+ba-</i> (3 examples) (<i>-lhek+ba-</i> ‘accuse, blame’ <i>-lhaba</i> ‘taste, try, test’ <i>-kwiyerrba</i> ‘make a mistake’)	<i>-lhvka-</i> ‘go’ ⁶
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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: -⁷]

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 [ə]. 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.

	Suffixes	4: <i>-maka-</i> ‘tell’
NP1	<i>-Ø</i>	<i>-maka-Ø</i>
NP2	<i>-na</i>	<i>-makv-na</i>
NP3	<i>-ma ~ -angvma</i>	<i>-makv-ma ~ -maka-ngvma</i>
P1	<i>-Ø</i>	<i>-maka-Ø</i>
P2	<i>-Ø</i>	<i>-maka-Ø</i>
REFL	<i>-jungwV-</i>	<i>-maka-jungwV-</i>
RECP	<i>-yi-</i>	<i>-makee-yi-</i>
CAUS	<i>-ji-</i>	<i>-maka-ji-</i>

Table 6.8: Conjugation 4: *-na*, *-Ø* (verb stems ending in /a/)

(11) Class 4

Thematic <i>+ka-</i> ~ <i>+kwa-</i> (e.g. <i>-warr+ka-</i> ‘sew’ <i>-rndarr+ka-</i> ‘pick up’ <i>-ma+ka-</i> ‘tell’ <i>-adhu+kwa-</i> ‘stab’)	FACT <i>-ka-</i> ~ <i>-kwa-</i> <i>-kwa-</i> ‘give’ <i>-ba-</i> ‘argue, hit’ <i>-(ya)ma-</i> ‘do, say’	Thematic <i>+ma-</i> (2 examples) (<i>-rndang+ma-</i> ‘make an intermittent noise’ <i>-kurarr+ma-</i> ‘spit’)
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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).⁹ Its paradigm is illustrated in Table 6.9 with the verb *-yawkabi-ji-* ‘forget’.

	Suffixes	5: CAUS <i>-ji-</i>
NP1	<i>-ya</i>	<i>-yawkabi-ji-ya</i>
NP2	<i>-na</i>	<i>-yawkabi-ji-na</i>
NP3	<i>-ma</i>	<i>-yawkabi-jv-ma</i>
P1	<i>-Ø</i>	<i>-yawkabi-ji-Ø</i>
P2	<i>-wa</i>	<i>-yawkabi-ju-wa</i>
REFL	<i>-jungwV-</i>	<i>-yawkabi-ja-jungwV-</i>
RECP	<i>-yi-</i>	<i>-yawkabi-jee-yi-</i>

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*, *-ni*), 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’ > *-lharri-ji-* ‘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: $-\emptyset$, $-\emptyset$ [JH class 8G (*-a*, $-\emptyset$); JW multiple classes; VL 1B (*-ni*, *-nga*)]

This is a highly distinct class, composed mainly of stance verbs. It is characterised by the allomorph $-\emptyset$ 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 *-mungskulha-* ‘sleep’ are: *-mungskulhv-nga* and *-mungskulhi-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), *-mungskulha-* (12b), and *-ambilya-* (12c).

- (12) a. *a-kv-rrak-arjiyinga dhalvda*
 VEG-NSR-forehead-stand toilet(VEG)
 ‘toilet’ (Lit: ‘toilet for forehead being upright’) (Angurugu Linguistics)
- b. *ma-mv-kv-mungskulhvnga*
 VEG-INALP-NSR-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-NSR-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 $-\emptyset$ with *-ya* in the NP1. Only the $-\emptyset$ 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 $-\emptyset$ with *-na*. Another feature that sets this subclass apart from the other two

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 P2 stem forms. What unites these subclasses is the *nga*-augment in (at least one allomorph of) the NP1 and P1 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 REFL form.

Table 6.10 presents the paradigm of subclass 6A; this subclass has no attested RECP forms.¹¹

	Augments + suffixes	6A: <i>-mungskulha-</i> ‘sleep’	6A: <i>-ambilya-</i> ‘be in one place’
NP1	<i>-nga-Ø ~ -ya</i>	<i>-mungskulhv-nga-Ø ~ -mungskulhi-ya</i>	-
NP2	<i>-Ø</i>	<i>-mungskulha-Ø</i>	<i>-ambilya-Ø</i>
NP3	<i>-ma (~ -angvma?)</i>	<i>-mungskulhv-ma</i>	<i>-ambilyv-ma</i>
P1	<i>-nga-Ø</i>	<i>-mungskulhv-nga-Ø</i>	-
P2	<i>-Ø</i>	<i>-mungskulhv-Ø</i>	<i>-ambilyv-Ø</i>
RECP	<i>-yi-</i>	---	-
CAUS	<i>-ji-</i>	<i>-mungskulhi-ji-</i>	-
NSR	<i>-nga</i>	<i>-kv-mungskulhv-nga</i>	<i>-k-ambilyi-nga</i>

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

Subclass 6A comprises five verbs:

(13) Class 6A (5 verbs)

- mungskulha-* ‘sleep’
- mvrkulha-* ‘lie down’
- ambilya-* ‘stay, live, be in one place’
- dhvrrvrnda-* ‘descend’
- abilyuwendha-* ~ *-abvlhuwendha-* ‘bow down’

In subclass 6B, the NP2 and P2 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 P1.

(14) Class 6B (3 verbs)

- ambarr-* ‘sit’
- +lha(lhv)-* ‘be upright’
- kvrruwanji-* ‘smell’

¹¹ However, these are expected to exist, as the RECP also has a collective reading. Hence a 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) *wurraminya nuw-angmakulhee-yi-na-ma awuruku-manja*
 COLL.goose COLL-sit-RECP-NP2-*ma* NEUT.billabong-LOC
 ‘the geese are sitting in the billabong’

(anin4_dl_au_003)

	Augments + suffixes	6B: -ambarr- ‘sit’
NP1	<i>-nga-Ø ~ -ya</i>	<i>-ambarrv-nga-Ø ~ -ambarri-ya</i>
NP2	<i>-na</i>	<i>-ambarrv-na</i>
NP3	<i>-ngvma ~ -ma</i>	<i>-ambarrv-ngvma ~ -ambarrv-ma</i>
P1	<i>-nga-Ø ~ -Ø</i>	<i>-ambvrrv-nga-Ø ~ -ambvrra-Ø</i>
P2	<i>-nv</i>	<i>-ambarrv-nv</i>
RECP	<i>-yi-</i>	<i>(-angmakulhee-yi-)</i>
CAUS	<i>-ji-</i>	<i>-ambarri-ji-</i>
NSR	<i>-nga</i>	<i>-k-ambarrv-nga ~ -k-ambvrrv-nga</i>

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.

	Augments + suffixes	6C: -arjiya- ‘stand’	6C: -andhiya- ‘look around’
NP1	<i>-nga-Ø</i>	<i>-arjiyi-nga-Ø</i>	<i>-andhiyi-nga-Ø</i>
NP2	<i>-Ø ~ -na</i>	<i>-arjiya-Ø ~ arji:-na</i>	<i>-andhiya-Ø</i>
NP3	<i>-ma ~ -ngvma</i>	<i>-arji-ngvma ~ arjiyv-ma</i>	<i>-andhv-ma</i>
P1	<i>-nga-Ø</i>	<i>-arjiyi-nga-Ø</i>	<i>-andhiyi-nga-Ø</i>
P2	<i>-Ø</i>	<i>-arjeey-Ø</i>	<i>-andheey-Ø</i>
RECP	?	-	-
CAUS	<i>-ji-</i>	<i>-arjiya-ji-</i>	<i>?andhiya-ji-</i>
NSR	<i>-nga</i>	<i>-arjiyi-nga</i>	<i>-andhiyi-nga</i>

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)
- | | | |
|-----|--------------------------|----------------------|
| | <u>Wubuy</u> | <u>Enindhilyakwa</u> |
| NP1 | <i>-murrkulha-nga-ng</i> | <i>-mvrkulhv-nga</i> |
| NP2 | <i>-murrkulhaa</i> | <i>-mvrkulha</i> |

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) <u>Intransitive class 6</u>	<u>Transitive class 2</u>
-ambarr- ‘sit’	-abvrra- ‘put down’
-ambilya- ‘stay, live’	-bilya- ‘attach’
-(lha)lhv- ‘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) <u>Intransitive class 1</u>	<u>Transitive class 2</u>
-kuwarrv- ‘be torn’	-kuwarra- ‘tear’
-dhadhv- ‘become burnt, cooked’	-dhadha- ‘burn, cook’
+waji- ‘twist’	-waja- ‘brush away’
+baji- ‘rub’	+baja- ‘hit’
-miji- ‘search’	-mija- ‘wait for’
-mardhv- ‘be painful’	-mardha- ‘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):¹² 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*

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.

(conjugations 2, 3, 5 and one allomorph in conjugation 6), or P1 *-nga* (one allomorph in conjugation 2). The NP1 and P1 stems in conjugation 6 are *nga*-augmented.

Atomic events require non-durative telic events, such as *die*, *arrive*, *return*, *stop*, as their input, as illustrated in (18). When they are fed atelic event structures such as states, they will coerce these into inchoative change of state readings, as illustrated for *be in pain* and *be upright* in (19). When the atomic event markers are fed atelic event structures such as activities, they will impose an inceptive reading onto these events, as exemplified for *go*, *jump* and *run* in (20).

- (18) a. *akina akwalya na-jungu-ma*
 NEUT.that NEUT.fish NEUT-die.P1-*ma*
 ‘the fish died’ (anin2_pw_au_004)
- b. *Yingi-yardha yenjerra dhv-rnd-enungwa?*
 3f-arrive.P1 around.here 3f-mother-2a.KIN
 ‘Has your mother arrived yet?’ (‘Search’ z74)
- c. *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)
- (19) a. *Kamv-dhaka-ma nvngk-akina m-akina makarda akwa*
 IRR.VEG/2-sting.NP1-*ma* 2-that VEG-that VEG.sea and
kv-mvrnda-mardhv-ma nvngk-envng-arngk-awura
 IRR.2-all.over-be.in.pain.NP1-*ma* 2-M.ALP-times-alone
 ‘The sea (where the bristleworm has been) will sting you, and you will be in pain at once.’
 (‘Yininya’ m6-7)
- 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’ (‘Brolga’ q39-40)
- (20) a. *Lhvkī-ye=ka nungkwa-lhangu-wa angalya!*
 IMP.2-go-NP1=EMPH 2.PRO-POSS-ALL NEUT.place
 ‘You go to your place!’ (‘Crocodile and Bluetongue’)
- b. *N-angkarrv-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.’ (‘Kurirra’)
- c. *Akwa n-angkarra.*
 and 3m-run.P1
 ‘And he ran off.’ (‘Chasm Island’ 21)

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 P2 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 P1 and P2).

- (21) a. *warma-junga, arjiyinga*
 IMP.2.rise-REFL.NP1 IMP.2.stand.NP1
 ‘Get up! Stand!’ (JH tape 68, ex. 113)
- b. *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. *Nen-alhvlhvke-nu...wa, nenv-dhvrrvrndvnga, 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. *A-yukujiya cloud na-lhvke-nv-ma, na-dhvrrvrndv-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.’ (‘Wurramara’)
- (23) a. *nvngv-rrak-ajeeyv-ma kamba 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. *ying-bvlhuwendhv-ma*
 3f-bow.P2-*ma*
 ‘she 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 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 INCH marked for atomic aspect in (24a) entails a sudden outburst of anger, which contrasts with the INCH taking a neutral P2 suffix in (24b).

- (24) a. *Biya dh-akina-lhangwa dhv-dharrvngka arndvrnda na-werrik-arda-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. *ni-yekirreri-dhv-na*
 3m-happy-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 non-durative, whereas the (b) example with the aspectually neutral tense suffix does not have such specification.

- (25) a. *nvngv-mvdhilyakba*
 1-cough.NP1
 ‘I cough (one cough)’ (anin2_pw_au_004)
- b. *nvngv-mvdhilyakbv-na*
 1-cough-NP2
 ‘I am coughing (several coughs)’ (anin2_pw_au_004)

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, ngarrv-rrak-adjeeya*
 12a-go-P2 12a-enter-P2 12a-forehead-stand.P2
 ‘we went, we came in and we sat down’ (anin2_pw_au_004)
- b. *Kvngv-lhvka-ja angalyu-wa ngalha-lhangu-wa alhvkvra, kvngv-lhawurradhv-na.*
 IRR.3f-go-NP2 NEUT.place-ALL 3f.PRO-POSS-ALL NEUT.house IRR.3f-return-NP2
 ‘She will go home to her house, she will return.’ (‘Burrawang’ o13)
- (27) *Biya yingv-nu-warda-nga ambaka eeka-mvrra. [...] Nu-ngwadhv-na. Kemba*
 and 3f-3m-hit-P2 later NEUT.stick-INSTR 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-CofR 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 berriki-lhangwa*
 IMP.2-enter-NP2 there gate(NEUT)-ABL
 ‘Enter through the gate!’ (VL1 p.414)
- c. *wurrv-nga-rrvngkv-na dhaka dhadhukuwarrkuwarrka 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-ma-lyangmi-lyang+badje-na-ma ma-m+adhangkwa 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.’ (‘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).

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).

- (31) *Nuw-angkarra*. *Nara ambaka-lhangwa kuw-angkarrv-na yeya-mvrra=wiya*
 NEUT-run.P1 not later-ABL IRR.NEUT-run-P2 go.by.foot-?INSTR=PRG
nuw-angkarrv-na. Nuw-angkarra, nuw-angkarra, nuw-angkarra. Ne-yaku-warrukwa
 NEUT-run-P2 NEUT-run.P1 NEUT-run.P1 NEUT-run.P1 NEUT/NEUT-river-cross.P2
ebina adhalyvma m-ibina-lhangwiya mamarra. Bi...ya
 NEUT.that.same NEUT.river VEG-that.same-ABL.PRG VEG.small.leaved and
nuw-akuma-rna adhalyvma-manja a-ki-yak-bijina mamvdhangkwa-manja.
 NEUT/NEUT-put-P2 NEUT.river-LOC NEUT-CL:FLUID-river-beside VEG.sand-LOC
Ngarnvngka na-lhawurradha, nuw-angkarra. Nuw-angkarru...wa. Engka
 again NEUT-return.P1 NEUT-run.P1 NEUT-run.P1...XTD NEUT.other
na-rndarrka. Na-lhawurradha ebina-lhangwiya nga...wa, nuw-akuma-rna
 NEUT/NEUT-grab.P1 NEUT-return.P1 NEUT.that.same-ABL.PRG still...XTD NEUT/NEUT-put-P2
ebina-manja angalya. Na-lhawu-lhawurradha, nuw-angkarra.
 NEUT.that.same-LOC NEUT.place NEUT-RDP-return.P1 NEUT-run.P1
Nuw-angkidikarri-nu...wa. Na-ma-nga.
 NEUT-RDP.run-P2...XTD NEUT/NEUT-take-P2
 ‘It [the cat (NEUT)] **ran**. It did not run slowly, it ran fast. It **ran**, and **ran**, and **ran**. It crossed
 over the river along the paperbark. Then it put the kitten down beside the river on the sand. It
went back again, it **ran off**. It **kept on running**. It **grabbed** another. It **came back** along the
 same way, it put the kitten down in the same place. It **kept going back**, it **ran off**. It kept
 running. It took another.’ (‘Bujikeda’ y38-55)

This prolonged event of the cat rescuing her kittens is broken up into pieces. Motion verbs marked P1 that signal atomic events express the stop-and-go motion of the cat. Interestingly, these markers of atomicity can co-occur with reduplicated verbs in Enindhilyakwa, something that Heath claims is not possible for Punctual aspect in Wubuy (1984: 341). Reduplication here signals repetition of an event that is portrayed as instantaneous and non-durative.

6.6 Composite mood marking

As is characteristic of the non-Pama-Nyungan languages (Verstraete 2005), mood in Enindhilyakwa is not marked in one specific slot in the verb template, but spread over two slots, represented by a combination of morphemes in a prefix and a suffix slot. Two series of pronominal prefixes encode the broad modal categories of realis and irrealis, which are combined with the suffixes to mark various modal and non-modal meanings. For example, the combination of an irrealis prefix with a P2 suffix in (32) signals counterfactuality, that is, the speaker’s assessment that something could have happened but did not.

- (32) *dh-akvna kvnga-ma-ngv-mvrra kembirra arakba ki-yengbi-nv-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)

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) *ngaya nvngu-ware-na-ma a-wurru-wurrariya ak-engkirra-ja*
 1.PRO 1-not.want-NP2-*ma* NEUT-RDP-bad IRR.12a-hear-NP2
 ‘I don’t want that we hear bad things’ (‘Mother’s advice’ j9)

(34) *arabawiya narrv-ma-ngekvraka-ma miyanga mema-mvrra me-me-m+eeka*
 long.ago 3a-VEG-make.P2-*ma* VEG.firestick VEG.this-INSTR VEG-INALP-INALP+tree
 ‘a long time ago people made firesticks with the wood of these trees (*miyarrawa*
 ‘VEG.red.kurrajong.tree’)’ (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

(iv) Irrealis + NP2: deontic

- (38) *Kvrr-adhvdiyara yikv-ngekburaka-jungu-na yikam-akbvrrangv-na-manja merra.*
2a-girl IRR.2a-make-REFL-NP2 IRR.VEG/2a-find-NP2-LOC VEG.blood
'You young girls have to be careful when you have your periods.' (Lit: 'when blood finds you') (GED p.104)

(v) Irrealis + P2: foreclosed epistemic counterfactual

- (39) *Ebinu-wa angalya=dha ying-engkirrike-na dhukwa ka-lhvkylhalhv-mvrru-wa=dha*
NEUT.this-ALL NEUT.place=TRM FEM-listen-NP2 maybe IRR.COLL-call.P2-ma-ALL=TRM
wurr-alhek-bina wurruwarda=dha 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) *narrv-ngayindha-ngv-ma kuw-alyvbarv-nv-ma akwalha a-m-adhangkwa*
3a-want-P2-ma IRR.3pl-eat-P2-ma 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-rrvngka nvng-ena*
NEG=EVIT IRR.1/3f-body-see.P2 1-this
'I wasn't supposed to look at her' ('Old days' 10)
b. *narv=maka kvni-yardha-nga adhuwaba*
NEG=EVIT IRR.3m-arrive-P2 today
'he should not have arrived today' (JS2 p.92)

(viii) Transitive hortative + NP2: hortative

- (42) *mama env-lhvka-ja ene-ja abvrv-ngarre-na*
okay HORT.3msg-go-NP2 3m.PRO-CofR HORT.3m/3a-visit-NP2
'it's okay, let him go and let him visit them' (VL1 p.418)

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

- (43) *Akwiyadhakina-manja ngarna nara ngarna ngi-yaminjama-ma.*
NEUT.that.kind.of-LOC 12a.this NEG 12a.this NEGNP-RDP.do-NP3
'We should never do that sort of thing.' ('Vehicle hire' k21)

(x) nara ng- + NP3: epistemic

- (44) *Nara nvng-ena ayarrka-ma ng-ardharrv-ma akwalya.*
NEG 1-this NEUT.hand-INSTR NEGNP-pierce-NP3 NEUT.fish
'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 2nd person subject and 1st 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.*
 2/1-give.NP1 1.PRO-ALL VEG-one
 ‘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).

- (46) a. *Yawa, yi-ngajee-yi-na=dha.*
 yes 12-fight-RECP-NP2=TRM
 ‘Yes, let’s fight.’ OR ‘we are fighting’ (‘Seagull and Pheasant’ u39-40)
- b. *Ngayamba-lhangwa yiba-lyang+barri-ya-lhangwa arvngka-manja.*
 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 P2, and 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.*
 NEG 2sgS.POKE(19).PSTIRR-3msgIO-give-PIMPERF female
 1. ‘You did not give him that girl.’
 2. ‘You shouldn’t have given him that girl.’ (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 =*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 PURposive 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.

Form		Modal meaning	<i>-ma ~ -mvrra</i>
Prefix	Suffix		
Realis	Npast1/2	Non-modal meanings (statements of fact); <i>and</i> Occasionally Deontic, Desiderative-intentional	(+)
	Past1/2	Non-modal meanings (statements of fact)	(+)
Irrealis	Npast1/2	Non-modal future; <i>and</i> Epistemic, Deontic, Desiderative-intentional	(+)
	Past2	Counterfactual; <i>and</i> Deontic, Desiderative-intentional	(+)
		+ Negative particle <i>nara</i> : Negated Past	-
Imperative	Npast1/2	Deontic 2 nd person	-
Hortative	Npast2	Intransitive Hortative (e.g. <i>let's go</i>)	(+)
		Transitive Hortative (e.g. <i>let him kiss her</i>)	-
<i>a- / ng-</i>	Npast3	+ Negative particle <i>nara</i> : Negated Npast	+ (= NP3)

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*
 IRR.3m-do-NP2-LOC IRR.3m/2-hit-NP2-LOC 2.PRO-CofR IRR.2/NEUT-take-NP2
eeka kvnu-warde-na arrkalha.
 NEUT.tree IRR.2/3m-hit-NP2 on.the.other.hand
 ‘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*
 1.PRO=EMPH IRR.1/2-hit-NP2-*ma* NEUT.tree-INSTR IRR.2-do.NP1-LOC
arngk-ingka-manja.
 NEUT.times-other-LOC
 ‘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) *Yarne=dha arakba=wiya, yirrv-kalharu-kwa ena angura.*
 1a.this=TRM already=DISTR 1a/NEUT-burnt.off.bush-FACT.P2 NEUT.this NEUT.fire
*Ena bujikeda **nvngv-rrvngka-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
angura. M-adhvrrungwarnee=ka mamarika nvm-angkarrv-na.
 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-CofR=EMPH NEUT.fire
advhrrungwarnee=ka nuw-arvmbvna-dhv-na. Ne-kalharv-dhv-na erribaba.
 NEUT.big=EMPH NEUT-?big-INCH-P2¹⁴ NEUT-burnt.off.bush-INCH-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.’ (‘Bujikeda’ y1-9)

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 aspectually 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 *-arvmbvna-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* ~ *-mvr* is present

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

- (50) *Nvng-ena nvngi-yengbi-na-ma mema-lhangwa adhuwaba dvraka*
 1-this 1-speak-NP2-*ma* VEG.that-ABL today truck(VEG)
ngakurra-lhangwa-lhangwa ngarnvmamalya-lhangwa Toyota-lhangwa, mena
 12a.PRO-POSS-ABL 12a.people-POSS T.-ABL because
warnvmamalya narrv-ma-kwa-ma mani. Nvmv-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-werri-gekburaka-jungu-ma, kvn-ambarri-ya-mvr*
 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 [wurrarjija ‘COLL.bird’] died.’ (Fieldnotes DL 1/12/08)

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

- (53) a. *nenv-rvngandha-ngv-mv-lhangwa nuw-awurikee-yi-na wurr-ababvrnv-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-wardv-ma y-akina mena*
 3a-small.PL NEG NEGNP-hit-NP3 MASC-that because
karrak-akbvrangv-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)

(v) Negated non-past (-ma only, obligatory, labelled NP3)

- (54) *Y-akina yingarna nu-warde-na-manja yinungungwangba nara ng-angv-ma*
 MASC-that MASC.snake MASC/MASC-kill-NP2-LOC MASC.animal NEG NEGNP-bite-NP3
y-akina yi-yukwayuwa-wiya alyvbalyv-ma wubvrra wurruwarda...
 MASC-that MASC-small.PL-PRG NEGNP.eat-NP3 like COLL.dog
 ‘When a snake kills an animal it doesn’t bite it into little pieces, it doesn’t eat like dogs
 do...’ (‘Snake and Dogs’)

The *-ma ~ -mvrra* suffix is present in these contexts for either of two reasons. Its presence in (i) the first-hand eyewitness accounts and (ii) expressions of opinions or sentiments is semantically determined, because the narrator presents the events through his own perspective. Although very common, the suffix is optional in such contexts, since the narrator has a choice whether to focus on his observations or opinions or not (see e.g. examples [48] and [49] above, where the narrator is very selective in which verbs he marks with *-ma*). By contrast, the suffix is obligatory in: (iii) relative clauses, (iv) subordinate clauses marked by a case suffix (save conditionals marked with LOC case *-manja*, see below)¹⁵, and (v) the negated non-past. In the negated non-past only the *-ma* variant occurs.

Waddy (n.d.-b) notes that the suffix also appears as an emphatic marker on nominals, as in (55).

- (55) *Kvrrv-dharrvngka, kvrrv-dharrvngka kvrru-wilyaba-mvrra.*
 2a-woman 2a-woman 2a-one-EMPH
 ‘You women, you women are all of the same kind.’ (‘Mixed marriages’ e30)

I propose that its function of emphasis is related to the first person focalisation function of the suffix, as it is used to express the opinion of the speaker (cf. ‘I tell ya, you women are all of the same kind!’). In other words, the *-ma ~ -mvrra* suffix on nominals is the same first person focalisation marker as it appears on verbs.

The following list is an outline of the contexts in which *-ma* is always, or nearly always, absent (where possible, the selected examples involve 1st person subjects, to show that the absence of the suffix cannot be due to the ‘wrong’ subject number).

¹⁵ Leeding (1989) presents some examples of case markers on verbs in main clauses which do not involve *-ma*. These examples suggest that (i) *-ma* is not obligatory preceding a case suffix, and (ii) case markers can also occur on verbs in the main clause (as indeed Leeding claims [p.308]).

(i) *kv-lhvka-ja-wa ngayuwa ng-adjirri-yi-lhangwa dhymbala*
 IRR.1-go-NP2-ALL 1.PRO 1-wash-NP1-ABL cloth(FEM)
 ‘I will go after I wash the clothes / Before I go I will wash the clothes.’ (VL1 p.494)

However, I find such examples very doubtful. In my data, case markers on verbs are complementizer cases, which create subordinate clauses, as is common in Australian languages (Chapter 8). I will leave it up to further research to determine the well-formedness of Leeding’s examples.

Contexts in which -ma ~ -mvrra is absent

(vi) Imperative mood

- (56) *yamv-na adhuwaba*
 IMP.2-do-NP2 today
 ‘do it today!’ (VL1 p.413)

(vii) Transitive hortative mood

- (57) *angv-nv-ngaji-na enuwa-manja*
 HORT.3f-3m-hit-NP2 3m.PRO-LOC
 ‘let her hit him’ (VL1 p.418)

(viii) Procedural narratives

- (58) *Ambaka k-ambilharrv-na yandhilhangwa yelyukwa kvnv-lharrv-na. Kembirra*
 later IRR.2-wait-NP2 until MASC.rain IRR.MASC-fall-NP2 then
kv-me-na nungku-lhangwa dhvrrabada akwa nungkuwa kv-lhvka-ja
 IRR.2/NEUT-take-NP2 2.PRO-POSS spear(NEUT) and 2.PRO IRR.2-go-NP2
mijiyelyu-wa. Nungkuwa kv-lhvka-ja makardu-wa akwa k-embilharrv-na yakujina.
 VEG.beach-ALL 2.PRO IRR.2-go-NP2 VEG.sea-ALL and IRR.2-wait-NP2 over.there
Kvny-rrvngkv-na-manja nungkuwa y-akina yimadhuwaya, nungkuwa
 IRR.2/MASC-see-NP2-LOC 2.PRO MASC-that MASC.stingray 2.PRO
kv-ardhvrrre-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-akvrranga-manja nvngk-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-lyingirraje-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)

(xii) 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.' (‘Lionel’ i31-2)

(xiii) Negated past (always absent?)

- (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' (VL1 p.409)

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 2nd person, not the 1st 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 1st 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-ngv-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-lhvka-ja-ma* *nvngk-ena* *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-murrkulha-ma* *nvngk-akina*
 VEG.heat.of.sun-LOC and IRR.2-RDP-body-lie.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 kvni-yakwabiji-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-yakwabijv-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-mvrra nv-mawuru-wa akena nara ngawa*
 3fdu-3m-chase-P2-*ma* 3m-moon-ALL but NEG cont.act
karrvngv-n-akbvrranga-rna
 IRR.3fdu-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) *N-angkarrv-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+badje-na-ma ma-m+adhangkwa 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-awiyebe-nv-ma mamawura. Kembirra yirrv-mungkulhvnga-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-adhakkbadja-ngv-ma ying-alyvbarv-nv-ma anhvnga dh-akina*
 3f-VEG-crush-P2-*ma* 3f-eat-P2-*ma* NEUT.food 3f-that
yingv-m-adhakkbaja-ngv-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 (NP3) 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 /ɹ/: for example, the NP and PI forms in Ngandi are *-ma-rang* and *-mi-ri*, respectively, and the P1 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 ~ -mvrra* suffix that follows the tense/aspect inflection was argued to be a first person focalisation marker. It is used when the speaker 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.